INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT SITE INSPECTION REPORT

FOR

WEBB WELL FIELD

FRANKLIN, INDIANA

JOHNSON COUNTY

U.S. EPA ID: INN000510423

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Signature Page
For
Webb Well Field Contamination
Site Inspection Report
Franklin, Indiana
Johnson County
U.S. EPA ID: INNO00510423

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SECTION I INTRODUCTION

The Site Investigation Section of Indiana Department of Environmental Management (IDEM), under a Cooperative Agreement (CA) with the United States Environmental Protection Agency (U.S. EPA), Region V, has been funded to perform inspections at certain sites listed in the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS). This work is conducted under the authority of the Federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 (Superfund), and the Superfund Amendments and Reauthorization Act (SARA) of 1986. Typically, a Preliminary Assessment (PA) is completed, and if the site is not given a "No Further Remedial Action Planned" (NFRAP) status, it will go on to a sampling inspection called a Site Inspection (SI).

The primary objectives of the SI work are:

- To collect data that will be used in the Hazard Ranking System (HRS) to determine whether the site is eligible for placement on the National Priorities List (NPL);
- To identify sites that may require removal actions to address immediate threats to human health and/or the environment.

The Site Investigation Section was given approval by the U.S. EPA to conduct an SI at the Webb Well Field site, located northeast of the town of Franklin in Johnson County, Indiana. Volatile Organic Compounds (VOC's) were detected in wells 2 and 3 of the Webb Well Field during routine sampling conducted by the Indiana American Water Company (IAWC) for IDEM's Ground Water Program in compliance with the Clean Water Act beginning in 1988 (See appendix G).

Information contained within this report will be used to evaluate this site to support a site decision regarding the need for further Superfund action, including the possibility for the Webb Well Field site to be considered for inclusion on the NPL.

SECTION II

SITE BACKGROUND

2.1 Introduction

This section presents information obtained from the IDEM files, discussions with Indiana American Water Company representatives, and site reconnaissance visits.

2.2 Site Description and Location

The Webb Well Field is located approximately 1 mile northeast of the town of Franklin, Johnson County Indiana. The population of Franklin is 23,595 (Appendix L). The water supply for the town of Franklin and a significant part of Johnson County is provided by the Indiana American Water Company and comes partially from the Webb Well Field.

Franklin is a rural but growing town approximately 25 miles south of Indianapolis. The terrain around Franklin is topographically flat to slightly rolling. The Webb Well Field consists of three wells, numbered 2, 3, and 5, and is bordered by farm fields on the north, south, east, and west. Hurricane Creek transects the farm fields and splits well number 5 from wells number 2 and 3 in the well field. Hurricane Creek flows within 30 feet of the nearest well (well number 2) on the east. The Webb Well Field lies approximately one half mile north east of the town of Franklin but is rapidly being surrounded by outward expansion of the town.

2.3 Site History

In April 2007, the IDEM Ground Water Section notified the Site Investigation Section of cis-1,2-Dichloroethylene (cis-1,2-DCE) and trans-1,2-Dichloroethylene (trans-1,2-DCE) that was detected in wells 2 and 3 of the Webb Well Field at levels above the United States EPA's maximum contaminant levels (MCL) which are 70 and 100 parts per billion (ppb) respectively. The wells were taken off line as a result of the contamination but were being kept for use in an emergency situation if needed. No readily apparent sources of the contamination were identified. A Pre-CERCLIS Screening and a Preliminary Assessment were conducted on the site in 2009 and early 2010. The PA identified many potential ssible

sources for the contamination in the northeast section of Franklin, but no readily apparent responsible facility.

SECTION III

PROCEDURES, FIELD OBSERVATIONS AND ANALYTICAL RESULTS

3.1 Introduction

This section outlines the procedures, observations, and analytical results of the Webb Well Field contamination investigation. IDEM's direct push drill rig was utilized to collect subsurface soil samples from potential sources of the contamination and from a background location believed to be up gradient from a source. The Indiana Underground Plant Protection Service (IUPPS) was contacted and called to the study area to identify any underground hazards prior to drilling. Ground water samples were collected from these soil borings as well as a municipal well, monitoring wells, and residential wells in the immediate area to help identify targets and the source of the contaminant plume.

3.2 Site Representative Interview

Representatives from Indiana American Water Company and the Johnson County Health Department were consulted during the Webb Well Field investigation. IDEM staff learned that wells 2 and 3 from the Webb Well Field were not being used because of the contamination that was discovered in them but they were being kept open in case of a need for additional water. The IAWC would still like to be able to use all of the wells in the Webb Well Field to service their needs. Well number 5, although uncontaminated, is used sparingly and intermittently to supplement the total water supply for IAWC consumers. Currently most of the water being used to service the IAWC customers in Franklin is coming from two other well fields (Sugar Creek, and Orme/Marlin/White River) that are 3.25 and 12 miles away from the Webb Well Field respectively. These well fields are not contaminated and not a part of this investigation. More specific information on these wells is described in the Webb Well Field PA.

3.3 Reconnaissance Inspection

On June 24 and September 29, 2010, SI staff visited the town of Franklin to conduct preliminary site visits to collect information to complete the Webb Well Field work plan and Site Inspection. Upon arrival, staff drove around the community to become familiar with local features and to identify any potential contaminant sources that were readily identifiable. The Webb Well Field was identified and the three individual wells within it were located. Residences near the Webb Well Field but outside the city limits and using private wells for their consumption were noted, and where possible, permission was sought from the home owners to sample the well during the sample event for the SI. The most industrialized area of Franklin lies approximately one mile southwest of the Webb Well Field. A large list of businesses and industries that exist in that area of town was included in the Webb Well Field PA.

One facility of interest was the Amphenol facility at the intersection of Hurricane Road and Upper Shelbyville Road. Amphenol has a confirmed release of Volatile Organics on their property which is currently being remediated under authority and oversight of the Resource Conservation and Recovery Act (RCRA) Corrective Action Program. Remedial reports with data accumulated over the last ten years indicate that ground water flow at Ampehenol is in a southerly direction away from the Webb Well Field. Locations for potential borings to help identify the source of the Webb Well Field contamination including adequate background locations were also identified during the site visit.

3.4 Sampling Procedures and Analytical Results

On October 5-8, 2010, SI staff met in Franklin for the site sampling event for the Webb Well Field SI. Samples were collected by IDEM staff at locations identified during the reconnaissance using available maps and information collected during the site visits. The samples were analyzed for Total Volatile Organic Compound (TVOC) parameters contained in the Contract Laboratory Program (CLP). The CLP analytes and the analytical results for ground water and subsurface soil are provided in Appendix H and I.

Thirty-three (33) ground water samples and five (5) subsurface soil samples were collected from a combination of residential wells, municipal wells, monitoring wells, and direct push borings in an attempt to update information on current conditions around the

Webb Well Field and identify potential sources for the Webb Well Field contamination (Appendix E). The samples included seven (7) duplicate samples, three (3) Matrix Spike/Matrix Spike Duplicates (MS/MSD), and four (4) background samples. The depth of the borings to determine a source ranged from 38 feet below ground surface (bgs) to 46 feet bgs. Samples were collected from ground water at three different depths in each boring to represent shallow, medium, and deep depths of the aquifer. One (1) duplicate and one (1) MS/MSD sample were collected as well for quality assurance/quality control (QA/QC). Only one (1) soil and one (1) ground water sample were collected from the background boring at six (6) and 22 feet respectively to represent normal soil and ground water conditions in the area. All sampling procedures followed the IDEM Site Investigation Quality Assurance Project Plan S-001-OLQ-R-SA-08-Q-RQ, April 30, 2008.

3.4.1 Ground Water Samples

The purpose of ground water sampling was to identify the source of contamination, particularly cis-1,2-DCE or trans-1,2-DCE, that was identified in the municipal wells and to determine if this contamination was also impacting nearby private residential wells. Ground water samples were collected in three (3) 40-milliliter vials preserved with hydrochloric acid (HCL). The wells were purged 15 minutes or the equivalent of three (3) well volumes prior to obtaining the water sample. Monitoring wells and background wells were purged and sampled using a bladder pump to minimize agitation of the water. Nitrile surgical gloves were worn and discarded between the collection of each sample. The sample containers were immediately placed on ice after collection while awaiting shipment to the laboratory. A total of 33 ground water samples were collected during the field event and analyzed for VOC's. The samples are identified by the numbers E2RL9, E2RM0-E2RM7 E2RM9, E2RN0-E2RN8, E2RP0-E2RP3, E2RP5, E2RP8, E2RP9, E2RQ0, E2RQ1, and E2RQ3-E2RQ7. Samples E2RM0, E2RM3, E2RN3, E2RQ0, and E2RQ6 were duplicate samples while samples E2RM5, E2RM6, E2RM7 and E2RQ7 were trip blanks. Refer to the sample location map (Appendix E) for locations of all samples. Summary Table 1 on page 8 contains additional details on each ground water sample.

A Key Findings List summarizing contaminant concentrations detected three (3) times above background is included on page 13. No residential wells sampled during this SI displayed any VOC contamination. Soil and ground water from a boring 1500 feet west of

the Webb Well Field revealed 22 ppb PCE in subsurface soil (E2RN9) and .59 ppb Cis-1,2-DCE (E2RPO) in deeper ground water, which was above detection but below three (3) times the detection limit. Three (3) times background levels were based on three (3) times the detectable quantity of the compound. Background samples were non detect for all VOC's. Refer to Appendix H for a complete list of the chemical analyses for ground water provided by the CLP laboratory. During the attempt to sample_wells 2 and 3 to confirm the presence of contamination that triggered this SI, when representatives from IAWC were enabling the power to run the pumps an electrical malfunction occurred rendering the pumps unusable. The wells which were sealed were not able to be sampled. Therefore, samples confirming the contamination in municipal wells 2 and 3 could not be taken. The wells had not been sampled since 2007 but the last sample from well number 2 contained Cis-1,2,DCE at 96.2 ppb. (see Appendix G) -Well number 5, also from the Webb Well Field, which historically showed no contamination was sampled. Analytical results from that sample revealed no contamination (Appendix H).

3.4.2 Subsurface Soil Samples

Subsurface soil samples were collected by IDEM at locations selected during the reconnaissance inspection to establish the presence or absence of contaminants in the subsurface soil emanating from the suspected source of contamination in the study area. Five (5) subsurface soil samples were collected during the SI. The samples are identified as samples E2RN9, E2RP4, E2RP6, E2RP7 and E2RQ2. Sample E2RP7 was a duplicate sample. Sample E2RQ2 was an MS/MSD The Subsurface Soil Sample Location and Comments Table on page 9 depicts the sample number, location, and any comments pertaining to each sample. Refer to Appendix I for the complete chemical analyses from subsurface soils from the Webb Well Field sampling event. Soil samples were collected from sample cores obtained by a direct push drill rig. The sample cores were screened with a MultiRae® photoionization meter to detect any VOC emissions. Each sample was then collected with three (3) EnCore® sampler kits according to CLP protocol. The material was directly transferred into the 5-gram EnCore® sample kits, sealed with the provided envelope, and placed on ice until ready for shipment to the laboratory. Nitrile surgical gloves were worn while sampling and discarded between the collection of each sample. Refer to the Sample Location Map (Appendix E) and Sample Location and Comment Table on Page 9 for the location of each sample. A Key Findings List summarizing contaminant concentrations detected three (3) times above background is included on page 10.

All media samples were shipped Priority Overnight to the assigned CLP laboratory at the end of each working day. The CLP laboratory assigned for this project was Shealy Environmental, 106 Vantage Point Drive, West Columbia South Carolina, 29172. The laboratory results were reviewed and evaluated for the quality criteria contained in the Indiana Quality Assurance Project Plan (QAPP). The results were determined to be acceptable for use.

3.5

Summary Tables

	Table 1 Sample Location and Comment Table Ground Water Samples				
Station ID	Sample ID	Location Location	Depth	Comments	
Exemption 9					
GW-7	E2RM2	Amphenol shallow monitoring well	16.5 feet	Clear, some solids, collected w/bladder pump	
GW-8	E2RM3	Amphenol shallow monitoring well	16.5 feet	Duplicate of E2RM2	
GW-9	E2RM4	Amphenol deep monitoring well	58 feet	Clear, collected w/bladder pump	
GW-20	E2RM5	IDEM Shadeland water lab	NA	Trip blank	
GW-21	E2RM6	IDEM Shadeland water lab	NA	Trip blank	
GW28	E2RM7	IDEM Shadeland water lab	NA	Trip blank	
Exemption 9			:		
Exemption 9					
GW-10	E2RN2	Indiana American Water, Webb Well Field, Well 5	87 feet	Municipal well	
GW-11	E2RN3	Indiana American Water, Webb Well Field, Well 5	87 feet	Duplicate of E2RN2	
Exemption 9					

			well depth	
xemption 9				
GW-12	E2RP0	Taken from corn field west of Webb Well Field near Hurricane Creek Same location as E2RN9, SB1	46 feet	Turbid, significant suspended solids
GW-13	E2RP1	Same location as E2RP0, E2RN9	30 feet	Turbid, brown, no odor
GW-14	E2RP2	Same location as E2RP1, E2RP0, E2RN9 SB1	15 feet	Turbid, brown, suspended solids
GW-15	E2RP3	Equipment Blank	NA	Equipment blank
GW-23	E2RP5	100 feet south of Upper Shelbyville Road at abandoned farm south of Webb Well Field	22 feet	Turbid, brown, odorless, high suspended solids.
GW-25	E2RP8	Directly behind Atlas Copco building same location as E2RP6, E2RP7, E2RP4	41 feet	Dark gray-brown, very turbid, strong effervescence
GW-26	E2RP9	Directly behind Atlas Copco building, same location as E2RP6-8	30 feet	Turbid, dark brownish gray, strong effervescence
GW-27	E2RQ0	Directly behind Atlas Copco building same location as E2RP6-9 duplicate of E2RP9	30 feet	Duplicate of E2RP9
GW-24	E2RQ1	Directly behind Atlas Copco building same location as E2RP6- E2RQ0	15 feet	Turbid, brown, very fine sand settling out
GW-29	E2RQ3	Corner of tree line and creek north edge of Kasting's farm field approximately 1500 feet northwest of Webb Well Field building	38 feet	Cloudy, brown, no apparent odor
GW-30	E2RQ4	Corner of tree line and creek north edge of Kasting's farm field approximately 1500 feet northwest of Webb Well Field building	28 feet	Very silty and brown
GW-31	E2RQ5	Corner of tree line and creek north edge of Kasting's farm field approximately 1500 feet northwest of Webb Well Field building	14 feet	Silty, cloudy, brown, with no apparent odor
GW-32	E2RQ6	Corner of tree line and creek north edge of Kasting's farm field approximately 1500 feet northwest of Webb Well Field building	14 feet	Duplicate of E2RQ5
GW-33	E2RQ7	IDEM Shadeland water lab	NA	Trip blank

Table 2 Sample Location and Comment Table Subsurface Soil Samples				
Station ID	Sample ID	Location	Depth	Comments
SB1	E2RN9	Taken from corn field west of Webb Well Field near Hurricane Creek	14 feet	Fine sand, medium grain, brown, moist, no odor or multi-Rae detection

SB2	E2RP4	100 feet south of Upper Shelbyville Road at abandoned farm south of Webb Well Field	6 feet	Yellow-brown sandy loam, background location
SB3	E2RP6	Directly behind the east side of the Atlas Copco building approximately 15 feet southeast of back door	12.5 feet	Very coarse sand
SB4	E2RP7	Directly behind Atlas Copco building approximately 15 feet southeast of back door	12.5 feet	Duplicate of E2RP6
SB5	E2RQ2	Corner of tree line and creek north edge of Kasting's farm field approximately 1500 feet northwest of Webb Well Field building	7-9 feet	Yellow-brown silt loam

Table 4 Key Findings List Ground water			
Sample Number	Contaminants (>3x background)	Level	
E2RM2	1,1,1-Trichloroethane	6.7 ppb	
E2RM3	1,1,1-Trichloroethane	6.5 ppb	

Table 5 Key Findings List Subsurface Soil			
Sample Number	Contaminants (>3 x background)	<u>Level</u>	
E2RN9	Tetrachloroethylene	22 ppb*	
*Result adjusted for qualification and biased low			

Sample #	Contaminants (ppb)	3X Background
E2RN1	Non Detect	Detectable limits
E2RN4	Non Detect	Detectable limits
E2RN5	Non Detect	Detectable limits
E2RP4	Non Detect	Detectable limits

SECTION IV

DISCUSSION OF MIGRATION PATHWAYS

4.1 Introduction

This section presents a discussion of pathways for contaminants migrating from the potential sources near the Webb Well Field contamination. Potential contaminant migration via Ground Water, Surface Water (including Drinking Water Threat, Human Food Chain Threat, and Environmental Threat), Soil Exposure and Air are discussed.

4.2 Ground Water Pathway

The Webb Wellfield is located in Johnson County in south-central Indiana within the New Castle Till Plains and Drainageways physiographic region (Gray, 2001). Topographically, the till plain is nearly flat, but undulates due to the presence of low interspaced hills eroded by post-glacial streams. From hill tops to river bottoms, ground surface elevations range from approximately 780 to 720 ft. above mean sea level (msl). Modern surface soils that developed on the unlithified (unconsolidated) post-glacial landscape provide useful information for interpreting and understanding the local geology. Soil types that occur in repeating patterns and close geographic proximity are often mapped as units called soil associations. Four (4) main soil associations occur in the vicinity of the Webb Wellfield. The Genesee - Eel and Genesee Shoals associations are soils developed on level flood plains and river channels that are well to somewhat poorly drain. Soils consist of nonglacial stream sediments (alluvium) consisting of clay, silt, sand and gravel that accumulated since the end of the last glaciation. These areas are subject to frequent flooding (USDA, 1979).

Similar to the soil associations just described, Fox-Ockley-Nineveh and Ockley-Fox soils are well drained. These soils formed on level plains to moderately sloping terraces consisting of deep to very deep loamy outwash overlying stratified (pancake) layers of sand and gravel. Outwash is deposited in front of advancing and retreating glaciers to form channels allowing melt water to flow downstream. Due to increased permeability, outwash has the ability to allow moisture and contamination to spread vertically downward to deposits beneath. Thick glacial outwash sediments are present within nearby Hurricane and Sugar Creeks.

Less well-drained, Miami-Fincastle and Crosby-Miami soil associations are present on nearly level to moderately steep uplands. These soils developed in thin to thick layers of silt overlying glacial till. In Indiana, windblown accumulations of silt are called loess, and till is the accumulation of fine to boulder sized sediments deposited by the advance and retreat of glacial ice over the land surface. As a general rule, tills lack the permeability necessary to allow moisture and contamination to quickly spread vertically downward.

Even less well drained are soils representing Rensselear-Whitaker, Westland-Sleeth and Crosby-Brookston associations. The drainage potential of these soils varies from somewhat to very poorly drained. These soils formed on nearly level and gently sloping terraces and uplands. While the Rensselear-Whitaker and Westland-Sleeth soils formed in

loamy (roughly equivalent amounts of clay, silt, and sand with organic material) outwash overlying permeable stratified layers of silty, loamy, sandy or gravel sediments, the Crosby-Brookston association is formed in thin layers of silt and in underlying glacial till. Beneath alluvial sediments that occur in stream and river channels and on adjacent floodplains, fine to coarse grained sediments of the earlier Atherton Formation were deposited by glacial melt waters forming outwash plains (Gray, 1989). Formations are deposits of similar character and form that can be mapped over a large area. Typical thicknesses of 100 ft. and more have been documented for the Atherton Formation (Shaver and others, 1970). Adjoining sediments of the Atherton, modern soils described above are developed on glacially derived tills of the Trafalgar Formation. Unconsolidated deposits of this formation are present regionally and are Wisconsinan age dating 17,000 to 23,000 years old (Shaver and others, 1970). Below the till ground moraine of the Trafalgar, unconsolidated deposits of the Jessup Formation are present. Although predominantly till, the Jessup Formation includes minor lenses of silt, sand and gravel. The Jessup includes pre-Wisconsinan glacial deposits of earlier glacial events previously known as the Illinoian and Kansan Stages. Deposits of the Jessup are recognizable by the occurrence of distinctive paleosols and weathering features on their upper contacts with Wisconsinan deposits above.

Unconsolidated deposits of the Jessup Formation rest directly upon lithified bedrock of Devonian and Mississippian age (Shaver and others, 1970), or as old as 417 million years. At this location, the New Albany Shale is present and is described as greenish-gray fissile (layered) shale containing minor layers of dolomite, dolomitic quartz sandstone, and organic inclusions. Depending on location, the New Albany shale ranges in thickness from 85 to 150 ft. dipping southwest 20 to 43 ft. per mile. Generally, shale is not a good source of water. Boring logs show that unconsolidated deposits in the area of the Webb Wellfield extend from the ground surface to as much as 165 ft. in depth, or 570 ft. above msl. At one location approximately one-half (½) mile north, shale bedrock was observed at the bottom of the boring.

The Webb Wellfield is located in the East Fork White River basin. Streams and rivers in this area, including Hurricane and adjacent creeks, drain into the Driftwood River which flows south - southwest in response to the regional bedrock slope (Fenelon and others, 1994). Boring logs from the immediate area demonstrate that the thick unconsolidated sand and gravel outwash deposits concentrated along Hurricane Creek, serve as the primary aquifer and source of drinking water. Although ground water flow maps have been prepared

by interested parties (IWM Consulting Group LLC, 2007), maps do not show ground water flow conditions near the Webb Wellfield. Static water elevations recorded on boring logs for the surrounding area range from 720 to 683 ft above msl. However, these elevations are not considered reliable and should not be used to interpret ground water flow directions and hydraulic gradients. As a result, the source(s) of ground water contamination affecting the Webb Well field cannot be determined without additional information.

The Ground Water Pathway is the focus of this SI. The Webb Well Field contamination stems from an uncontrolled release to ground water that has contaminated the municipal water supply for the town of Franklin. Residences near the Webb Well Field but outside the service boundaries for Indiana American Water also use the same aquifer for their private drinking water supply. Ground water data collected during the field portion of this SI suggests that ground water flow in the area of the Webb Well Field is in a southeasterly direction (appendix M). Sample results collected during this SI revealed one well with VOC contamination over three (3) times the established background levels for the Webb Well Field contamination. The contaminant identified was 1,1,1-trichloroethane which was detected at 6.7 and 6.5 parts per billion in samples E2RM2 and E2RM3, duplicate samples from the same well. The well was a monitoring well located at the Amphenol site at 400 Forsythe Street. Amphenol is currently remediating a contaminant plume on their property. The plume has been adequately characterized and is being remediated under the authority of the RCRA Corrective Action Program. It does not appear to be affecting the Webb Well Field or nearby area. Support for this position is gained by sample results from another boring behind the Atlas Copco facility (samples E2RP6, E2RP7, E2RP8 E2RP9, E2RQ0, and E2RQ1) which revealed no contamination but lies down gradient from the Amphenol facility in the direction of the Webb Well Field.

The soil sample from boring 1, E2RN9, collected in the farm field directly west of the Webb Well Field at a depth of 14 ft. contained tetrachloroethylene (PCE) at levels three (3) times the background level for the compound. The result was "J" qualified because it exceeded the instrument calibration range. The sample was not diluted and reanalyzed. To reflect this discrepancy the result was adjusted (Appendix O) using procedures described in EPA 540-F-94-028, Using Qualified Data to Document Observed Release and Observed Contamination, November 1996. The adjusted result was 22 ppb. Cis-1,2-DCE was also identified in the same boring in ground water at a depth of 46 Ft. (sample E2RP0) at a level of .59 ppb. This level did not reach three (3) times the detection level for cis-1,2-DCE which

was .50 ppb, though it did represent a confirmed level of contamination in that location. No contaminants were detected in ground water from the same boring at a 15 or 30 ft. depth (E2RP1 and E2RP2). Many of the sample results for this SI contained results that were "J" or "R" flagged due to conditions that occurred during analysis. None of these flagged results occurred on analytes that affected the levels of contamination that drive the results of this SI except for the situation noted above. The IDEM Chemistry review for the Webb Well Field (Appendix O) discusses all qualified data contained in the analytical package.

The former Hougland tomato packing plant (identified as Reed Mfg. Services and Crossroads Recycling in the Webb Well Field PA) is less than 100 feet west of boring 1. Many different historical operations have existed in that location and possibly many different chemicals have been used on the property. The plant is now occupied by a recycling center and a steel fabricator. The eastern portion of the property where the packing plant stood is still unimproved, and historical aerial photos provided to IDEM by IWM consulting, an environmental consultant representing Amphenol show that this portion of the property was an auto salvage yard in the 1990s and throughout the last 55-60 years has been excavated, filled, and disturbed numerous times. A 1941 aerial photo shows pits or standing water within 100 feet of where boring 1 was placed. These pits were filled by 1956 (Appendix L).

Samples E2RQ3, E2RQ4, E2RQ5, and E2RQ6 were collected from the corner of the corn field, where a railroad and a waterway intersect, northwest of the Webb Well Field. No contaminants were identified in either soil or ground water from any depth at that location.

See the Key Findings List on page 11 for the list of ground water contaminants found during this investigation above three (3) times the background level.

4.3 Surface Water Pathway

The nearest surface water body to the Webb Well Field is Hurricane Creek which runs through the Webb Well Field dissecting it between wells 2 and 3 and well number 5. Hurricane Creek runs within 30 feet of wells 2 and 3 to the east. Hurricane Creek flows south/southwest flowing into Young's Creek at Providence Park approximately 1.75 miles downstream from the Webb Well Field, then into the Big Blue River approximately 8.8 miles downstream from the well field. No surface water intakes exist within the 15-mile surface water pathway downstream from the site.

The surface water pathway discussion addresses three (3) potential threats; drinking water threat, human food chain threat, and the environmental threat.

4.3.1 Drinking Water Threat

Residents of Franklin and the area surrounding Webb Well Field use ground water from municipal and private residential wells to service their consumptive needs. There are no surface water intakes within the 15-mile downstream surface water pathway from the Site (Appendix D). The threat to the public from contamination to drinking water via the_surface water route is very unlikely.

4.3.2 Human Food Chain Threat

The human food chain threat category specifically targets fisheries potentially affected by the migration of contaminants from the site. The primary fisheries within the 15-mile surface water pathway of the site are Hurricane Creek, Young's Creek, and Sugar Creek. The principle uses of these bodies of water are fishing and recreation.

There is no specific fish consumption advisory for Hurricane Creek or Young's Creek in Indiana. Sugar Creek in Johnson County approximately nine (9) miles downstream from the probable point of entry (ppe) has a level 1 or 2 Fish Consumption advisory for mercury or PCB's in Carp, Northern Hogsucker, Black Redhorse, Bluegill, Longear Sunfish, and Rock Bass of specific lengths. (Appendix K)

Additionally, the entire State of Indiana has a fish advisory for all Carp in Indiana Streams of any length due to PCB's (Appendix K). The fish advisory for Carp in the State of Indiana is due to either PCB's or mercury in the fish tissue. Neither of these contaminants is a contaminant of concern for the Webb Well Field Contamination. The surface water and sediments do not appear to be at risk from this project's contaminant of concern. Generally, low levels of volatiles in moving surface water dissipate fairly rapidly via the mixing of the stream.

4.3.3 Environmental Threat

The Indiana Department of Natural Resources (DNR) was contacted to determine if there were any significant natural features or endangered, threatened, and rare species located within one (1) mile of the subject site. According to DNR, there are several sensitive environments located within the target distance limits of the Webb Well Field (see Appendix F). There is no evidence that conditions at the Webb Well Field would have a significant effect on these sensitive environments due to the contamination existing below surface.

4.4 Air Pathway

No air samples were collected as part of this SI. A release of CLP analytes to the air was not documented during the investigation of the Webb Well Field site. Field screening instrumentation recorded no elevated contaminant readings while collecting the media samples. Presently, there is no historical documented release of contaminants to the air at the Site or nearby. There is a potential for vapor intrusion issues to exist nearer to a source of the contamination that was detected in the Webb Well Field, if that source can be found. Presently there is no known threat to the air pathway from the Webb Well Field Contamination.

4.5 Soil Exposure

Subsurface soil samples were collected during the Webb Well Field Contamination SI. The samples were collected in an attempt to identify potential sources in the study area for attribution of contaminants to the ground water. There were no surface soil samples collected during this investigation or in past investigations of this site.

According to State and local file information reviewed by staff, and interviews with local officials, there is no documentation of an incident of direct contact with CLP analytes in the study area.

4.6 Summary

The Webb Well Field SI gathered information necessary to evaluate the site as a candidate for the NPL. Subsurface soils, residential wells, monitoring wells, and a municipal well sample were collected to determine the presence of hazardous substances at potential

source area locations and in the possible migration pathways. In addition, information was collected to confirm target populations and environments potentially at risk from the site.

The town of Franklin utilizes ground water from both municipal and private wells as its only source of water for consumptive use. In 1988, Cis-1,2-DCE contamination was discovered in the drinking water of municipal wells 2 and 3 in the Webb Well Field which services the town of Franklin and some surrounding area, in Johnson County.

The source of the contamination is unknown. Subsurface soil samples collected from the open field west of the well field and adjacent to the former Hougland tomato packing plant on the east contained PCE, and deeper ground water from the same location contained low levels of cis,1,2-DCE. No other samples or borings contained any contaminants relatable to those found in the Webb Well Field. All residential well samples were uncontaminated.

Based on the confirmed detections of Cis,1,2-DCE and Trans, 1,2-DCE in wells 2 and 3 during past monitoring by IAWC, and the current presence of PCE and low levels of Cis,1,2-DCE in the boring approximately 1,500 feet west of the wells, evidence suggests that contamination from that direction may have been drawn to wells 2 and 3 during peak or routine pumping of the wells.

SECTION V

REFERENCES

- USGS 7.5' Franklin Topographic Quadrangle Map, dated 1961, Revised 1988, 1994, 1:24,000 scale.
- IWM Consulting Group Historical Record Search, Industrial Area Northeast of the Former Amphenol Facility, Franklin Indiana, March 1991.
- Indiana Department of Natural Resources, Division of Nature Preserves, Endangered, Threatened, and Rare Species, Indianapolis, Indiana.
- Indiana Department of Natural Resources. Well logs for Johnson County, Indiana.
- U.S. Bureau of Census, 2000. <u>2000 Census of Population, Characteristics of the Population, General Population Characteristics, Indiana</u>. Washington, D.C. U.S. Bureau of Census TIGER Data.



WEATHER: Sunny Mild **SAMPLE TYPE:** Subsurface Soil **TIME**: 10:05 AM DATE: October 5, 2010
SAMPLE ID # E2RN9 **DESCRIPTION:** Close up of sample E2RN9 collected 14' deep from boring 1, in com field west of Webb municipal wells near Hurricane Creek.



DATE: October 5, 2010TIME: 10:05 AMWEATHER: Sunny MildSAMPLE ID # E2RN9SAMPLE TYPE: Subsurface Soil

DESCRIPTION: Close up of sample E2RN9 collected 14' deep from boring 1, in corn field west of Webb municipal wells near Hurricane Creek.



DATE: October 5, 2010TIME: 10:05 AMWEATHER: Sunny MildSAMPLE ID # E2RN9SAMPLE TYPE: Subsurface Soil

DESCRIPTION: Picture with background of sample E2RN9 collected 14' deep from boring 1, in corn field west of Webb municipal wells near Hurricane Creek.



DATE: October 5, 2010TIME: 12:40 PMWEATHER: Sunny MildSAMPLE ID # E2RP0SAMPLE TYPE: Ground Water

DESCRIPTION: Close up of sample E2RP0 collected 46' deep from boring 1, in corn field west of Webb Municipal wells near Hurricane Creek.



DATE: October 5, 2010 SAMPLE ID # E2RP0

WEATHER: Sunny Mild SAMPLE TYPE: Ground Water **TIME**: 12:40 PM

DESCRIPTION: Close up of sample E2RP0 collected 46' deep from boring 1, in corn field west of Webb municipal wells near Hurricane Creek.



WEATHER: Sunny Mild SAMPLE TYPE: Ground Water **TIME**: 2:40 PM **DATE**: October 5, 2010 SAMPLE ID # E2RP1 **DESCRIPTION:** Close up of sample E2RP1 collected 30' deep from boring 1, in corn field west of Webb municipal wells near Hurricane Creek.



DATE: October 5, 2010TIME: 2:20 PMWEATHER: Sunny MildSAMPLE ID # E2RP1SAMPLE TYPE: Ground Water

DESCRIPTION: Picture with background of sample E2RP1 collected 30' deep from boring 1, in corn field west of Webb municipal wells near Hurricane Creek.



DATE: October 5, 2010TIME: 2:45 PMWEATHER: Sunny MildSAMPLE ID # E2RP2SAMPLE TYPE: Ground Water

DESCRIPTION: Close up of sample E2RP2 collected 15' deep from boring 1, in corn field west of Webb municipal wells near Hurricane Creek.



DATE: October 5, 2010TIME: 2:45 PMWEATHER: Sunny MildSAMPLE ID # E2RP2SAMPLE TYPE: Ground Water

DESCRIPTION: Picture with background of sample E2RP2 collected 15' deep from boring 1, in corn field west of Webb municipal wells near Hurricane Creek.



DATE: October 5, 2010TIME: 2:55 PMWEATHER: Sunny MildSAMPLE ID # E2RP3SAMPLE TYPE: Equipment Blank

DESCRIPTION: Close up of sample E2RP3, equipment blank.



WEATHER: TIME: 2:55 PM DATE: October 5, 2010 SAMPLE ID # E2RP3

Sunny Mild

SAMPLE TYPE: Equipment Blank

DESCRIPTION: Picture with background of sample E2RP3, equipment blank.



DATE: October 5, 2010TIME: 5:20 PMWEATHER: Sunny MildSAMPLE ID # E2RP4SAMPLE TYPE: Subsurface Soil

DESCRIPTION: Close up of sample E2RP4 collected 6' deep from boring 2, 100' south of upper Shelbyville Road south of the Webb Well Field facility.



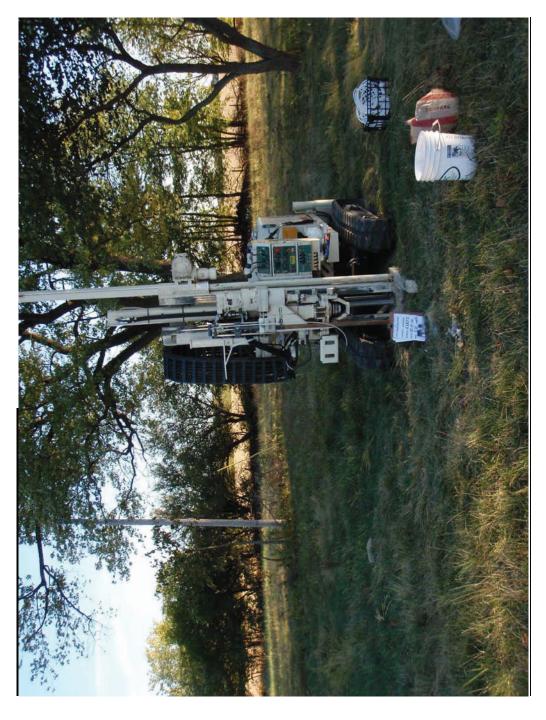
DATE: October 5, 2010TIME: 5:20 PMWEATHER:SAMPLE ID # E2RP4SAMPLE TYPE: Subsurface Soil

DESCRIPTION: Picture with background of sample E2RP4 collected 6' deep at boring 2 100' south of upper Shelbyville Road south of the Webb Well Field facility.



DATE: October 5, 2010TIME: 6:10 PMWEATHER: Sunny MildSAMPLE ID # E2RP5SAMPLE TYPE: Ground Water

DESCRIPTION: Close up of sample E2RP5 collected 22' deep from boring 2, 100' south of upper Shelbyville Road south of the Webb Well Field facility.



DATE: October 5, 2010TIME: 6:10 PMWEATHER: Sunny MildSAMPLE ID # E2RP5SAMPLE TYPE: Ground Water

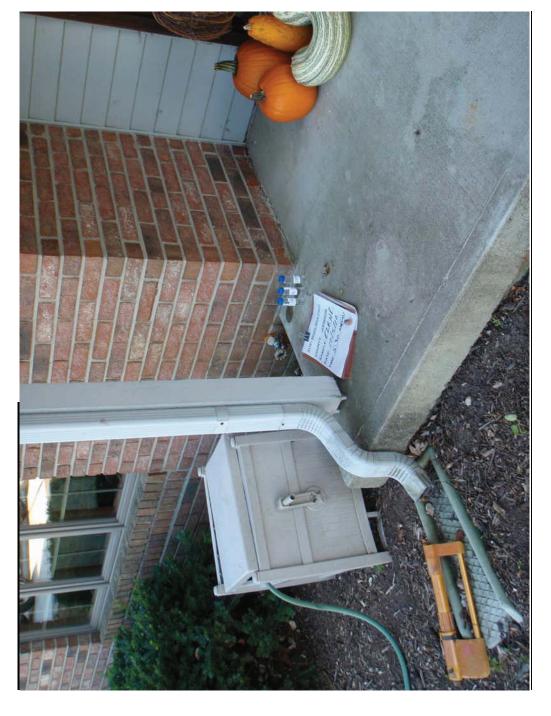
DESCRIPTION: Picture with background of sample E2RP5, collected 22' deep at boring 2, 100' south of upper Shelbyville Road south of the Webb Well Field facility.

Site: Webb Well Field



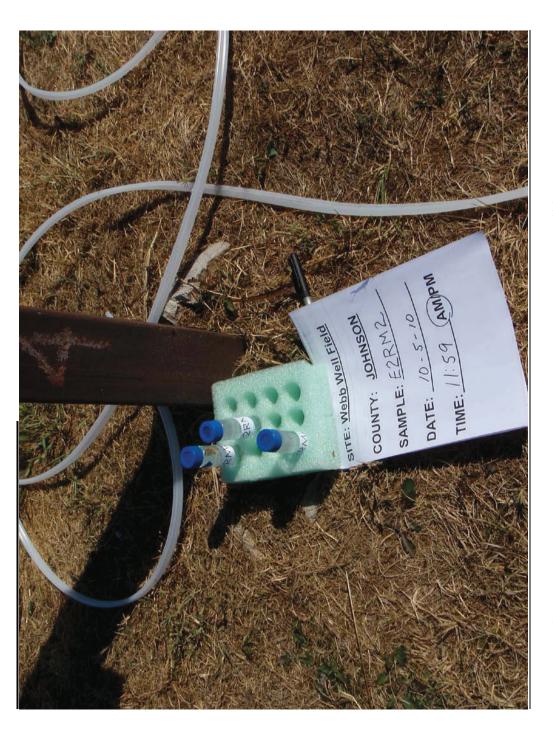
DATE: October 5, 2010TIME: 5:30 PMWEATHER: Sunny MildSAMPLE ID # E2RN8SAMPLE TYPE: Residential Well

DESCRIPTION: Exemption 9



DATE: October 5, 2010
SAMPLE ID # E2RN8

TIME: 5:30 PM WEATHER: Sunny Mild SAMPLE TYPE: Residential Well



DATE: October 5, 2010TIME: 11:59 AMWEATHER: Sunny MildSAMPLE ID # E2RM2SAMPLE TYPE: Ground water, Monitoring Well

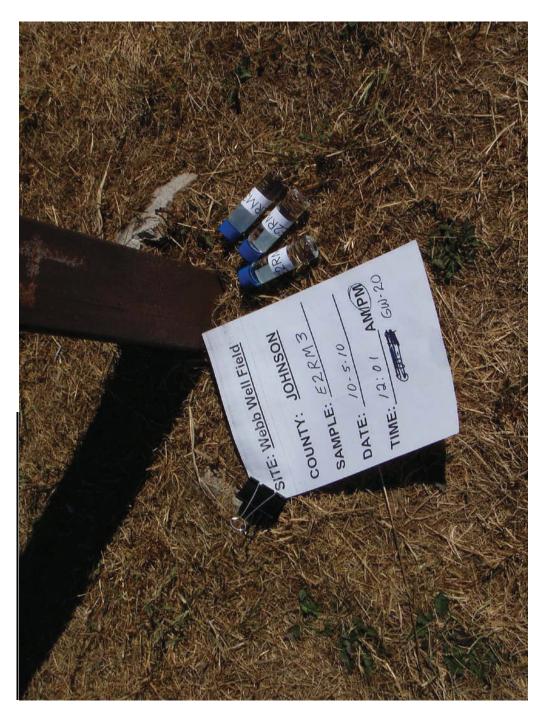
DESCRIPTION: Close up of sample E2RM2 collected at Amphenol facility monitoring well, 1.65' deep.



DATE: October 5, 2010
SAMPLE ID # E2RM2

SAMPLE TYPE: Ground Water, Monitoring Well WEATHER: Sunny Mild TIME: 11:59 AM

DESCRIPTION: Taken with background of sample E2RM2 collected at Amphenol facility monitoring well, 16.5' deep.



SAMPLE TYPE: Ground water, Monitoring Well, Duplicate WEATHER: Sunny Mild **TIME**: 12:01 PM DATE: October 5, 2010
SAMPLE ID # E2RM3

DESCRIPTION: Close up of sample E2RM3 collected at Amphenol facility monitoring well, 1.65' deep.



 DATE: October 5, 2010
 TIME: 12:01

 SAMPLE ID # E2RM3
 SAMPLE TY

 Duplicate
 Duplicate

TIME: 12:01 PM WEATHER: Sunny Mild SAMPLE TYPE: Ground Water, Monitoring Well,

DESCRIPTION: Taken with background of sample E2RM3 collected at Amphenol facility monitoring well, 16.5' deep.



WEATHER: Sunny Mild **TIME**: 12:55 PM SAMPLE ID # E2RM4 DATE: October 5, 2010

SAMPLE TYPE: Ground water, Monitoring Well

DESCRIPTION: Close up of sample E2RM4 collected at Amphenol facility monitoring well, 58' deep.





DATE: October 6, 2010TIME: 2:45 PMWEATHER: Sunny MildSAMPLE ID # E2RP9SAMPLE TYPE: Ground water

DESCRIPTION: Taken with background of sample E2RP9 collected at Atlas Copco facility Boring 3, 30' deep



WEATHER: Sunny Mild **SAMPLE TYPE:** Subsurface Soil **TIME**: 10:10 AM DATE: October 6, 2010 SAMPLE ID # E2RP6

DESCRIPTION: Close up of sample E2RP6 collected at Atlas Copco facility, Boring 3, 12.5' deep.



DATE: October 6, 2010TIME: 10:10 AMWEATHER: Sunny MildSAMPLE ID # E2RP6SAMPLE TYPE: Subsurface Soil

DESCRIPTION: Taken with background of sample E2RP6 collected at Atlas Copco facility Boring 3, 12.5' deep.



DATE: October 6, 2010 SAMPLE ID # E2RP7

WEATHER: Sunny Mild TIME: 11:20 AM WEATHER: Sunny Mi SAMPLE TYPE: Subsurface Soil, Duplicate **DESCRIPTION:** Close up of sample E2RP7 collected at Atlas Copco facility, Boring 3, 12.5' deep.



DATE: October 6, 2010TIME: 11:20 AMWEATHER: Sunny MildSAMPLE ID # E2RP7SAMPLE TYPE: Subsurface Soil, Duplicate

DESCRIPTION: Taken with background of sample E2RP7 collected at Atlas Copco facility Boring 3, 12.5' deep.



DATE: October 6, 2010TIME: 2:30 PMWEATHER: Sunny MildSAMPLE ID # E2RP8SAMPLE TYPE: Ground Water

DESCRIPTION: Close up of sample E2RP8 collected at Atlas Copco facility, Boring 3, 41' deep.





WEATHER: Sunny Mild Ground Water SAMPLE TYPE: **TIME**: 2:30 PM DATE: October 6, 2010 SAMPLE ID # E2RP8 **DESCRIPTION:** Taken with background of sample E2RP8 collected at Atlas Copco facility Boring 3, 41' deep.



WEATHER: TIME: 2:45 PM DATE: October 6, 2010
SAMPLE ID # E2RP9

SAMPLE TYPE: Ground Water

Sunny Mild

DESCRIPTION: Close up of sample E2RP9 collected at Atlas Copco facility, Boring 3, 30' deep.





WEATHER: Sunny Mild TIME: 2:45 PM WEATHER: SAMPLE TYPE: Ground Water DATE: October 6, 2010 SAMPLE ID # E2RN9

DESCRIPTION: Taken with background of sample E2RP9 collected at Atlas Copco facility, Boring 3, 30' deep.



WEATHER: Sunny Mild SAMPLE TYPE: Ground Water, Duplicate **TIME**: 2:46 PM DATE: October 6, 2010 SAMPLE ID # E2RQ0 **DESCRIPTION:** Close up of sample E2RQ0 collected at Atlas Copco facility, Boring 3, 30' deep,

Duplicate of E2RP9.



WEATHER: Sunny Mild Ground Water, Duplicate SAMPLE TYPE: **TIME**: 2:46 PM **DATE**: October 6, 2010 SAMPLE ID # E2RQ0 DESCRIPTION: Taken with background of sample E2RQ0 collected at Atlas Copco facility, Boring 3, 30' deep Duplicate of E2RP9.



DATE: October 6, 2010TIME: 2:46 PMWEATHER: Sunny MildSAMPLE ID # E2RQ1SAMPLE TYPE: Ground Water

DESCRIPTION: Close up of sample E2RQ1 collected at Atlas Copco facility, Boring 3, 15' deep.

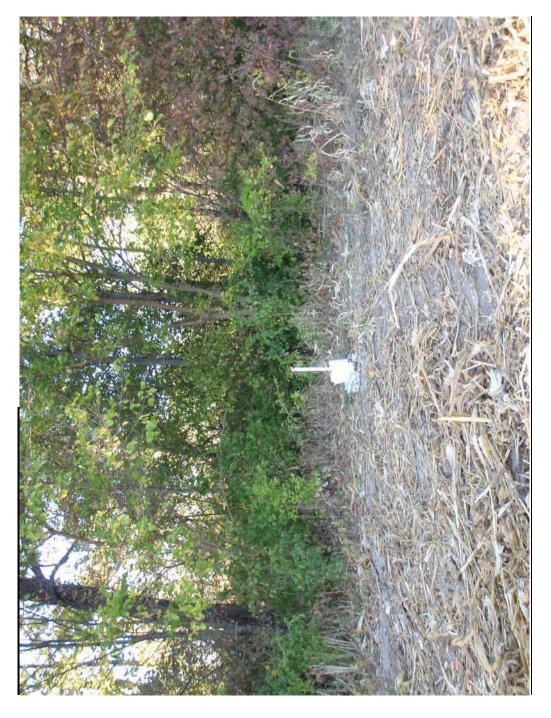


WEATHER: Sunny Mild Ground Water SAMPLE TYPE: **TIME**: 3:25 PM DATE: October 6, 2010 SAMPLE ID # E2RQ1 **DESCRIPTION:** Taken with background of sample E2RQ1 collected at Atlas Copco facility, Boring 3, 15' deep.



DATE: October 6, 2010TIME: 5:55 PMWEATHER: Sunny MildSAMPLE ID # E2RQ2SAMPLE TYPE: Subsurface Soil, MS/MSD

DESCRIPTION: Close up of sample E2RQ2 collected at corner of tree line and creek, Boring 4, 7-9' deep.



Subsurface Soil, MS/MSD **WEATHER:** SAMPLE TYPE: TIME: 5:55 PM SAMPLE ID # E2RQ2 DATE: October 6, 2010

Sunny Mild

DESCRIPTION: Taken with background of sample E2RQ2 collected at corner of tree line and creek, Boring 4, 7-9' deep.



WEATHER: Sunny Mild **SAMPLE TYPE:** Ground Water **TIME**: 10:10 AM DATE: October 7, 2010 SAMPLE ID # E2RQ3 **DESCRIPTION:** Close up of sample E2RQ3 collected at corner of tree line and creek, Boring 4, 38' deep.



WEATHER: Sunny Mild **SAMPLE TYPE:** Ground Water **TIME**: 10:10 AM DATE: October 6, 2010 SAMPLE ID # E2RQ3 **DESCRIPTION:** Taken with background of sample E2RQ3 collected at corner of tree line and creek,

Boring 4, 38' deep.



DATE: October 7, 2010TIME: 10:25 AMWEATHER: Sunny MildSAMPLE ID # E2RQ4SAMPLE TYPE: Ground Water

DESCRIPTION: Close up of sample E2RQ4 collected at corner of tree line and creek, Boring 4, 28' deep.



DATE: October 7, 2010TIME: 10:10 AMWEATHER: Sunny MildSAMPLE ID # E2RQ4SAMPLE TYPE: Ground Water

DESCRIPTION: Taken with background of sample E2RQ4 collected at corner of tree line and creek, Boring 4, 28' deep.

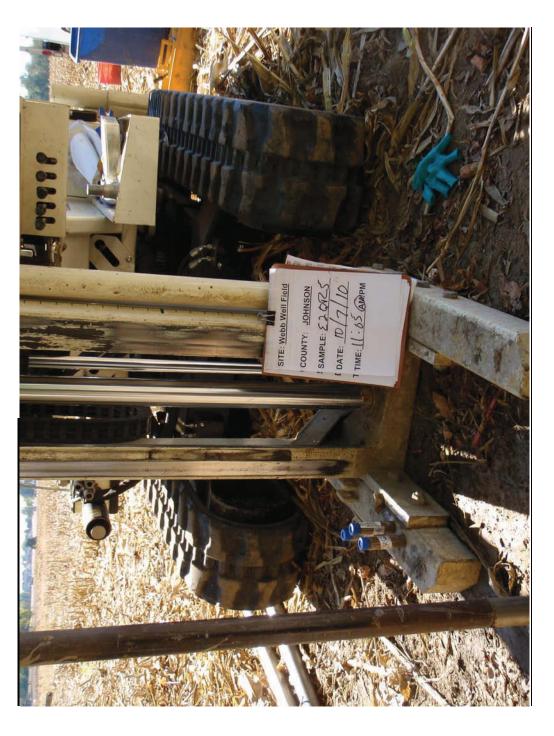


SAMPLE TYPE: Ground Water **TIME**: 11:06 AM DATE: October 7, 2010 SAMPLE ID # E2RQ5

DESCRIPTION: Close up of sample E2RQ5 collected at corner of tree line and creek, Boring 4, 14' deep.



WEATHER: Sunny Mild **SAMPLE TYPE:** Ground Water **TIME**: 11:05 AM DATE: October 7, 2010 SAMPLE ID # E2RQ5 **DESCRIPTION:** Taken with background of sample E2RQ5 collected at corner of tree line and creek, Boring 4, 14' deep.



DATE: October 7, 2010TIME: 11:05 AMWEATHER: Sunny MildSAMPLE ID # E2RQ5SAMPLE TYPE: Ground Water

DESCRIPTION: Close up of sample E2RQ5 collected at corner of tree line and creek, Boring 4, 14' deep.



SAMPLE TYPE: Ground Water Duplicate **TIME**: 11:06 AM DATE: October 7, 2010 SAMPLE ID # E2RQ6 **DESCRIPTION:** Close up of sample E2RQ6 collected at corner of tree line and creek, Boring 4, 14' deep. Duplicate of E2RQ5.



DATE: October 7, 2010TIME: 11:06 AMWEATHER: Sunny MildSAMPLE ID # E2RQ6SAMPLE TYPE: Ground Water, Duplicate

DESCRIPTION: Taken with background of sample E2RQ6 collected at corner of tree line and creek, Boring 4, 14' deep. Duplicate of E2RQ5.



DATE: October 5, 2010 SAMPLE ID # E2RL9

WEATHER: Sunny Mild **SAMPLE TYPE:** Residential Well TIME: 8:55 AM



DATE: October 5, 2010 SAMPLE ID # E2RL9

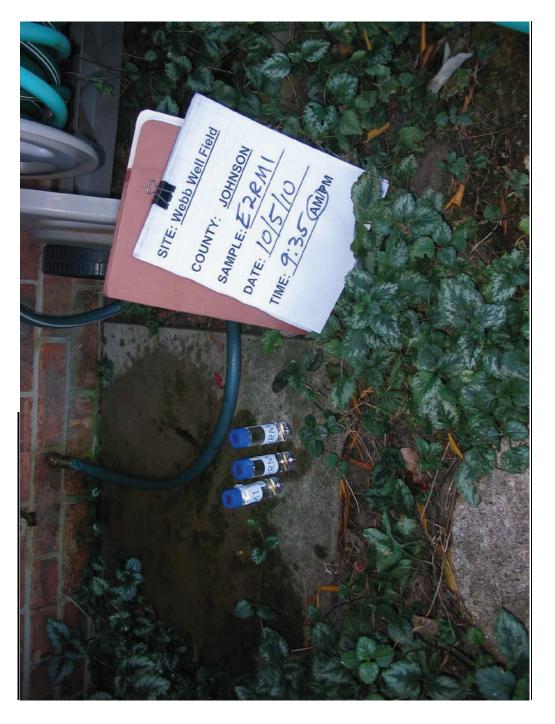
WEATHER: Sunny Mild **SAMPLE TYPE:** Residential Well TIME: 8:55 AM



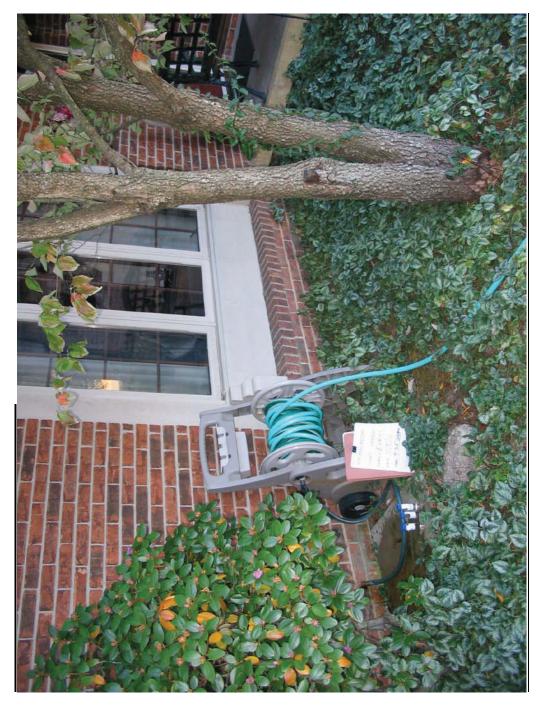
Duplicate WEATHER: Sunny Mild **SAMPLE TYPE:** Residential Well, **TIME**: 8:55 AM



Duplicate WEATHER: Sunny Mild **SAMPLE TYPE:** Residential Well. TIME: 8:55 AM



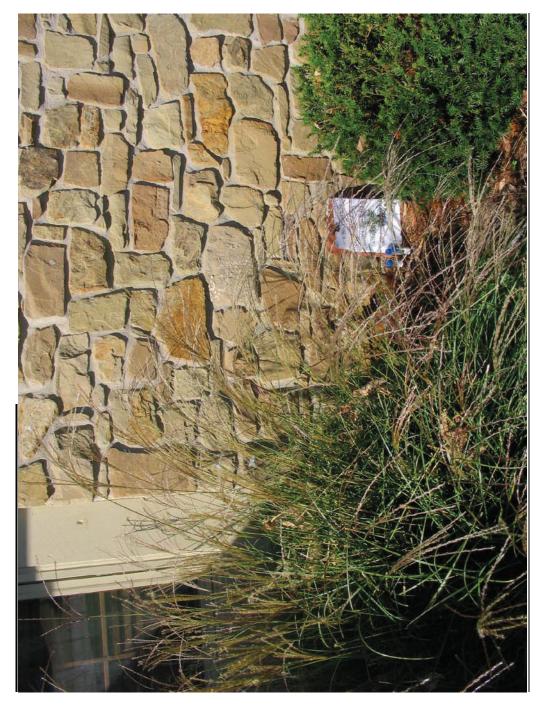
WEATHER: Sunny Mild **SAMPLE TYPE:** Residential Well TIME: 9:35 AM



WEATHER: Sunny Mild **SAMPLE TYPE:** Residential Well **TIME**: 9:35 AM



WEATHER: Sunny Mild **SAMPLE TYPE:** Residential Well TIME: 11:45 AM



 DATE: October 5, 2010
 TII

 SAMPLE ID # E2RM9
 SA

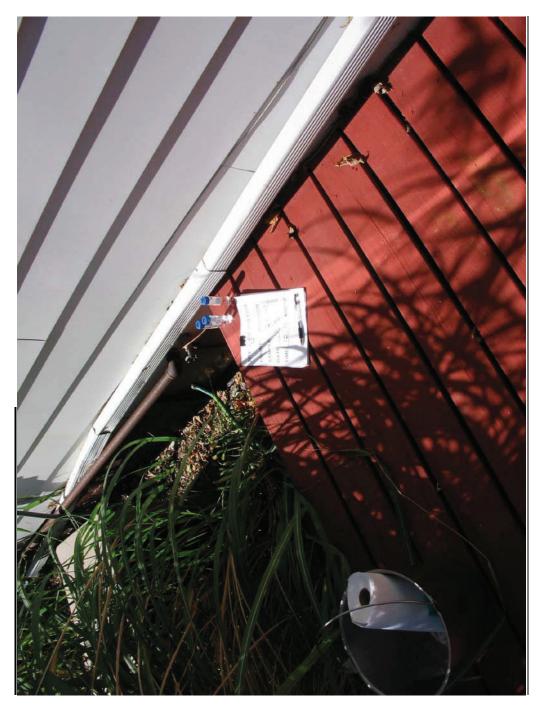
TIME: 11:45 AM WEATHER: Sunny Mild SAMPLE TYPE: Residential Well

exemption 9



TIME: 12:15 AM WEATHER: Sunny Mild

SAMPLE TYPE: Residential Well



WEATHER: Sunny Mild TIME: 12:45 AM

SAMPLE TYPE: Residential Well



TIME: 12:50 PM WEATHER: Sunny Mild

SAMPLE TYPE: Residential Well

xemption 9



WEATHER: Sunny Mild **TIME**: 12:50 PM

SAMPLE TYPE: Residential Well



DATE: October 5, 2010 SAMPLE ID # E2RN2

SAMPLE TYPE: Municipal Well



TIME: 1:55 PM WEATHER: Sunny Mild SAMPLE TYPE: Municipal Well



DATE: October 5, 2010 SAMPLE ID # E2RN3

WEATHER: Sunny Mild SAMPLE TYPE: Municipal Well, Duplicate **TIME**: 2:00 PM



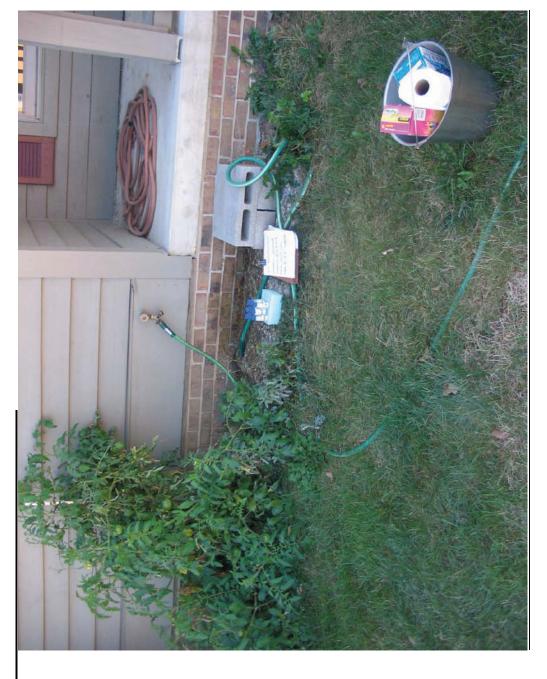
TIME: 1:55 PM WEATHER: Sunny Mild SAMPLE TYPE: Municipal Well, Duplicate

xemption 9



TIME: 2:25 PM WEATHER: Sunny Mild SAMPLE TYPE: Municipal Well, Duplicate

xemption 9



TIME: 2:25 PM WEATHER: Sunny Mild SAMPLE TYPE: Residential Well



TIME: 3:00 PM WEATHER: Sunny Mild SAMPLE TYPE: Residential Well



WEATHER: Sunny Mild **SAMPLE TYPE:** Residential Well **TIME**: 3:00 PM



WEATHER: Sunny Mild **SAMPLE TYPE:** Residential Well **TIME**: 3:15 PM **DATE**: October 5, 2010 SAMPLE ID # E2RN6



DATE: October 5, 2010 SAMPLE ID # E2RN6

TIME: 3:15 PM WEATHER: Sunny Mild SAMPLE TYPE: Residential Well

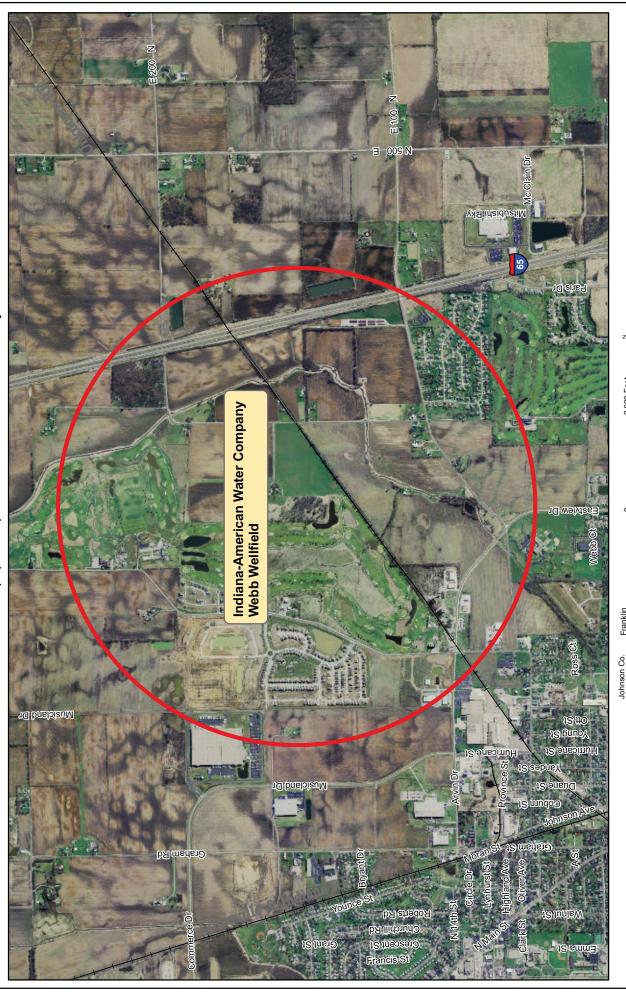


DATE: October 5, 2010 SAMPLE ID # E2RN7

WEATHER: Sunny Mild TIME: 4:00 PM WEATHER: SAMPLE TYPE: Residential Well

Indiana-American Water Company Webb Wellfield,

Site Location Map (Aerial), Franklin, Johnson County, IN



This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes. Mapped By. Lornaire Wright, Office of Land Quality Date: December 21, 2006

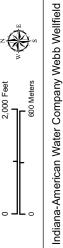








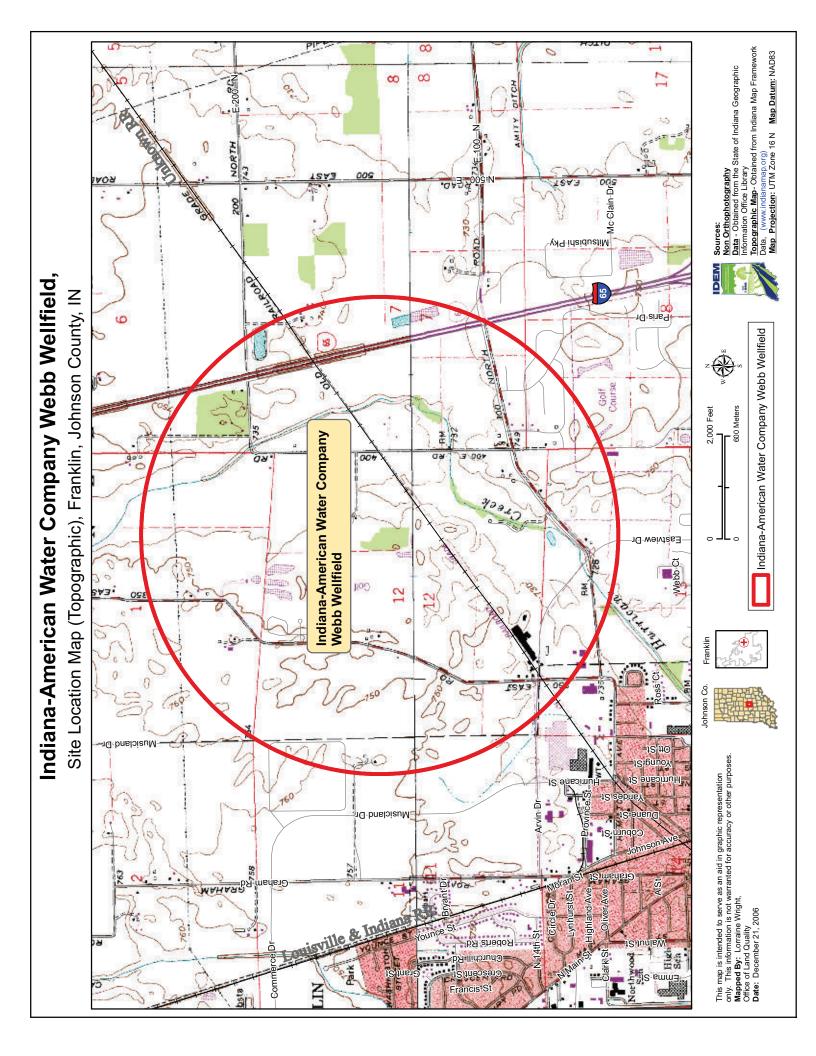


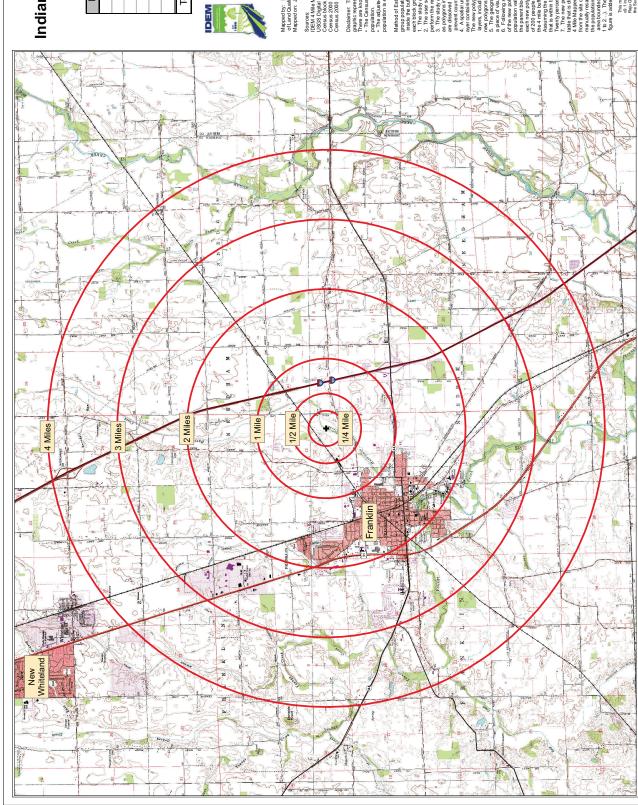




Non Orthophotography
Data - Obtained from the State of Indiana Geographic
Information Office Library
Orthophotography- Obtained from Indiana Map Framework Data, (www.indianamap.org)

Map Projection: UTM Zone 16 N Map Datum: NAD83





Indiana-American Water Company, 4 Mile Radius Map, Webb Wellfield,

Franklin, Johnson County, IN

Adjusted Population	154	356	1132	6513	2982	5424	19561
Buffer Distance	0.25 Mile	0.5 Mile	1 Mile	2 Mile	3 Mile	4 Mile	Total Population





Johnson Co





Sources:
1014 Mile Mapper Application
10505 Ugilar Raster Graphics 1.24,000 topgraphic map
10505 Ugilar Braster Graphics 1.24,000 topgraphic map
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1

Desdamer. This map does not represent a legal document. It is intended to serve as an aidin profit representation only it. Is not written det nacuratory or sulability from purpose. There are known sources of error in the opculation restinates presented on this map including. The Coreus 2000 block group population data is out of date, and is itself an imperfect estimate of

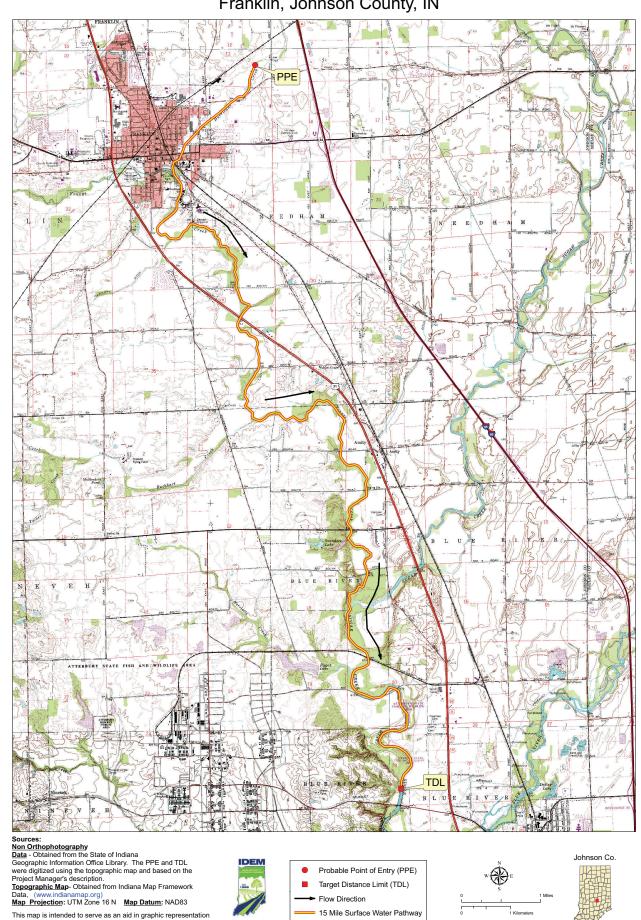
population.

The adjusted population estimate derived from the Consus 2000 block group data assumes that the oppulation sevenly distributed in each block group polygon.

Method of Estimating Population. The adjusted population estimate is the sum of Cennus 2000 block group populations (TOALEOP (Med a) adjusted to hidde only the seas of the block group scratiated resident the first property of the property

15 Mile Surface Water Pathway Map

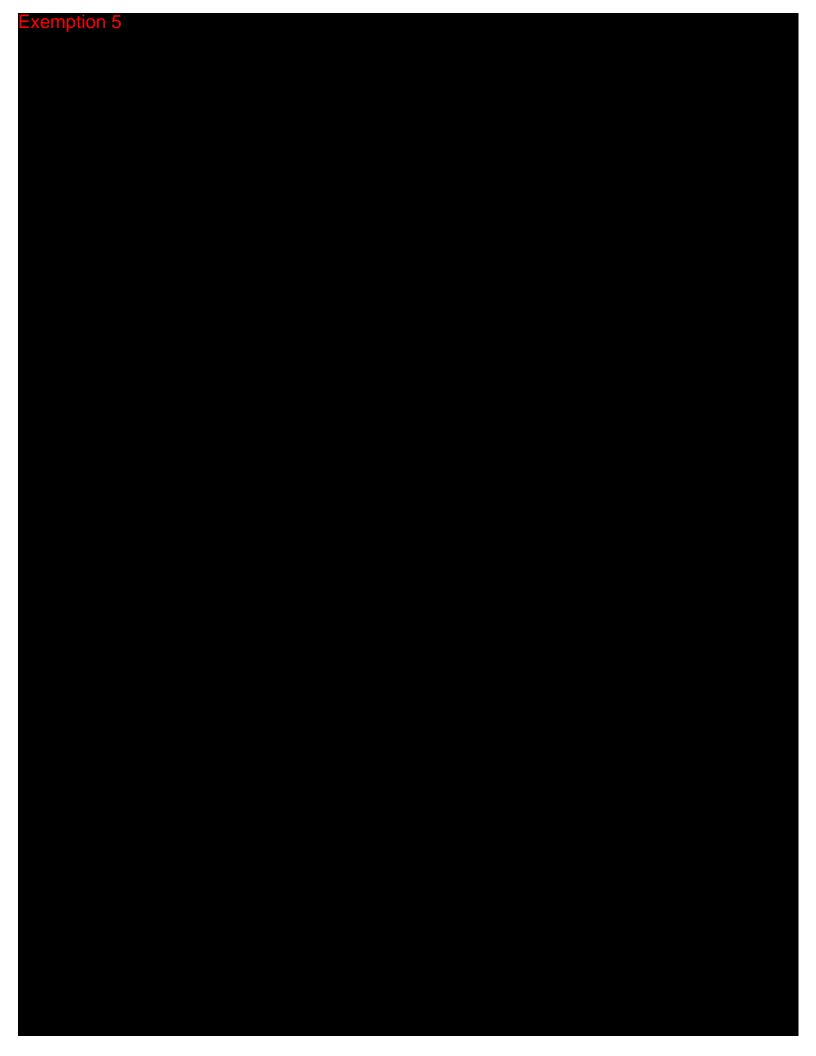
Indiana-American Water Company, Webb Wellfield, Franklin, Johnson County, IN

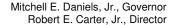


This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes. **Mapped By:** Lorraine Wright, Office of Land Quality **Date:** January 26, 2010











Division of Nature Preserves 402 W. Washington St., Rm W267 Indianapolis, IN 46204-2739

September 28, 2010

Mr. Tim Johnson Indiana Department of Environmental Management 100 North Senate Avenue Indianapolis, IN 46204

Dear Mr. Johnson:

I am responding to your request for information on the endangered, threatened, or rare (ETR) species, high quality natural communities, and natural areas documented from the Webb Wellfield project area, Franklin, Johnson County, Indiana. The Indiana Natural Heritage Data Center has been checked and enclosed you will find information, on data sheets and by GIS shapefiles, on the ETR species documented within the project area.

For more information on the animal species mentioned, please contact Christie Stanifer, Environmental Coordinator, Division of Fish and Wildlife, 402 W. Washington Room W273, Indianapolis, Indiana 46204, (317)232-4080.

The information I am providing does not preclude the requirement for further consultation with the U.S. Fish and Wildlife Service as required under Section 7 of the Endangered Species Act of 1973. If you have concerns about potential Endangered Species Act issues you should contact the Service at their Bloomington, Indiana office.

U.S. Fish and Wildlife Service 620 South Walker St. Bloomington, Indiana 47403-2121 812)334-4261

At some point, you may need to contact the Department of Natural Resources' Environmental Review Coordinator so that other divisions within the department have the opportunity to review your proposal.

For more information, please contact:

Department of Natural Resources attn: Christie Stanifer Environmental Coordinator Division of Fish and Wildlife 402 W. Washington Street, Room W273 Indianapolis, IN 46204 (317)232-4080

Please note that the Indiana Natural Heritage Data Center relies on the observations of many individuals for our data. In most cases, the information is not the result of comprehensive field surveys conducted at particular sites. Therefore, our statement that there are no documented significant natural features at a site should not be interpreted to mean that the site does not support special plants or animals.

Due to the dynamic nature and sensitivity of the data, this information should not be used for any project other than that for which it was originally intended. It may be necessary for you to request updated material from us in order to base your planning decisions on the most current information.

Thank you for contacting the Indiana Natural Heritage Data Center. You may reach me at (317)232-8059 if you have any questions or need additional information.

Sincerely,

Ronald P. Hellmich

Ronald P. Hellmich Indiana Natural Heritage Data Center

Attachments Data sheet

ETR data GIS Shapefiles

Endangered, Threatened and Rare Species Documented Within Webb Wellfield Project Area, Franklin, Johnson County, Indiana

Туре	Species Name	Common Name	Fed	State	TownRange	Date	Comments
Bird	Bartramia longicauda	Upland Sandpiper		SE	011N004E 12 SH NEQ & NH SWQ	1994-07	
HERRIOTTS CRE Mollusk	EK Villosa lienosa	Little Spectaclecase		SSC	011N005E 20	1997-12-19	FRESH DEAD
HURRICANE CRE Reptile	EK Clonophis kirtlandii	Kirtland's Snake		SE	012N004E 23	1950S	
SUGAR CREEK Insect Odonata	Enallagma divagans	Turquoise Bluet		SR	011N005E 20	2004	
Mollusk	Pleurobema clava	Clubshell	LE	SE	012N005E 33		WEATHERED
Mollusk	Lampsilis fasciola	Wavyrayed		SSC	012N005E 33	2008-09-08	DEAD Weathered Shells
Mollusk	Ptychobranchus fasciolaris	Lampmussel Kidneyshell		SSC	012N005E 34	2008-09-08	FRESH AND WEATHERED
Mollusk	Simpsonaias ambigua	Salamander Mussel		SSC	011N005E 17 NEQ NEQ NEQ	1990	DEAD, LIVE WEATHERED SHELLS
Mollusk	Villosa fabalis	Rayed Bean	С	SSC	011N005E 8	2008-09-08	FRESH DEAD
Mollusk	Quadrula cylindrica cylindrica	Rabbitsfoot	С	SE	012N005E 3	2008-09-08	WEATHERED SHELLS
Mollusk	Villosa lienosa	Little Spectaclecase		SSC	012N005E 22	2008-09-08	FRESH DEAD
YOUNGS CREEK							
Mollusk	Villosa lienosa	Little Spectaclecase		SSC	011N005E 17	1995-08-13	WEATHERED DEAD
Mollusk	Obovaria subrotunda	Round Hickorynut		SSC	011N005E 08 SWQ SWQ NWQ & NWQ NWQ SWQ	1990	WEATHERED SHELLS
Mollusk	Villosa lienosa	Little Spectaclecase		SSC	012N004E 25 SWQ SWQ SEQ	1990	WEATHERED SHELLS
Mollusk	Epioblasma triquetra	Snuffbox		SE	011N005E 17	1995-07-03	WEATHERED SHELLS
ATTERBURY FIS	H AND WILDLIFE AREA						
Bird	Ammodramus henslowii	Henslow's Sparrow	,	SE	011N005E 20 SEQ SWQ	1997-07-13	
Bird	Bartramia longicauda	Upland Sandpiper		SE	011N005E 30	1988-05-11	
Bird	Ammodramus henslowii	Henslow's Sparrow	,	SE	011N005E 19	1997-06-10	
Bird	Cistothorus platensis	Sedge Wren		SE	011N005E 19	1997-07-10	
Mammal	Taxidea taxus	American Badger		SSC	011N005E 19	1985-07-04	
FURNESS FEN Bird	Cistothorus platensis	Sedge Wren		SE	011N005E 20 SEQ SWQ	1994-07-09	

Fed: LE = listed federal endangered; C = federal candidate species

State: SE = state endangered; ST = state threatened; SR = state rare; SSC = state species of special concern; SG = state significant; WL

= watch list; no rank = not ranked but tracked to monitor status

Endangered, Threatened and Rare Species Documented Within Webb Wellfield Project Area, Franklin, Johnson County, Indiana

Type Bird	Species Name Rallus limicola	Common Name Virginia Rail	Fed	State SE	TownRange 011N005E 20 SEQ SWQ	Date 1989-06-03	Comments
MINK MEADOW Bird	Cistothorus platensis	Sedge Wren		SE	011N004E 14 NWQ SEQ	1989-07-29	
SUGAR CREEK Mollusk	Epioblasma torulosa rangiana	Northern Riffleshell	LE	SE	011N005E 20 NEQ NWQ SWQ	1990	WEATHERED SHELLS
Mollusk	Villosa lienosa	Little Spectaclecase		SSC	011N005E 20 NEQ NWQ SWQ	1998-09-01	WEATHERED SHELLS
Mollusk	Simpsonaias ambigua	Salamander Mussel		SSC	011N005E 29 NEQ SEQ NWQ	1990	WEATHERED SHELLS
Mollusk	Epioblasma torulosa rangiana	Northern Riffleshell	LE	SE	011N005E 29 NEQ SEQ NWQ	1990	WEATHERED SHELLS
Mollusk	Pleurobema clava	Clubshell	LE	SE	011N005E 20 NEQ NWQ SWQ	1998-09-01	WEATHERED DEAD
Mollusk	Ptychobranchus fasciolaris	Kidneyshell		SSC	011N005E 32	1998-09-01	
Mollusk	Quadrula cylindrica cylindrica	Rabbitsfoot	С	SE	011N005E 32	1998-09-01	WEATHERED SHELLS
Mollusk	Lampsilis fasciola	Wavyrayed Lampmussel		SSC	011N005E 29 NEQ SEQ NWQ	1990	WEATHERED SHELLS
Mollusk	Epioblasma triquetra	Snuffbox		SE	011N005E 32	1998-06-01	FRESH DEAD
ATTERBURY RES	SERVE FORCES TRAINING	AREA					
Bird	Ammodramus henslowii	Henslow's Sparrow		SE	011N005E 30	1997-07-13	
High Quality Natural Community	Wetland - seep circumneutral	Circumneutral Seep		SG	011N005E 32 NWQ	1990-07-02	
ATTERBURY TRA	AINING AREA 2.						
Vascular Plant	Chelone obliqua var. speciosa	Rose Turtlehead		WL	011N005E 32 NEQ NWQ	1993-09-24	
KLEIBER ON THE							
Mammal	Pipistrellus subflavus	Eastern Pipistrelle		SSC	011N005E 32	2005-06-10	
Mammal	Myotis lucifugus	Little Brown Bat		SSC	011N005E 32	2005-06-10	
Mammal	Myotis sodalis	Indiana Bat or Social Myotis	LE	SE	011N005E 32	2006-07-27	
SUGAR CREEK							
Mammal	Lasiurus borealis	Eastern Red Bat		SSC	011N005E 32	2005-06-10	
Mammal	Nycticeius humeralis	Evening Bat		SE	011N005E 32	2006-07-26	

Fed: LE = listed federal endangered; C = federal candidate species

State: SE = state endangered; ST = state threatened; SR = state rare; SSC = state species of special concern; SG = state significant; WL

= watch list; no rank = not ranked but tracked to monitor status

Appendix C

Analytical Data

IN5241005-WEBB-VOC's.xls

Date	Source	Voc	Conc. PPB	MCL PPB
7/24/1989	Webb Plant Finished Water	cis-1,2-Dichloroethylene	2.8	70
11/3/1989	Webb Plant Finished Water	cis-1,2-Dichloroethylene	1	70
1/17/1990	Webb Plant Finished Water	cis-1.2-Dichloroethylene	1.2	70
4/25/1990	Webb Plant Finished Water	cis-1,2-Dichloroethylene	2.6	70
8/13/1990	Webb Plant Finished Water	cis-1,2-Dichloroethylene	8.7	70
2/4/1991	Webb Plant Finished Water	cis-1,2-Dichloroethylene	10.9	70
4/8/1991	Webb Plant Finished Water	cis-1,2-Dichloroethylene	6.1	
7/17/1991	Webb Plant Finished Water	cis-1,2-Dichloroethylene	15.2	70
1/10/1992	Webb Plant Finished Water			70
2/27/1992	Webb Plant Finished Water	cis-1,2-Dichloroethylene	19.9	70
4/24/1992	Webb Plant Finished Water	cis-1,2-Dichloroethylene	15.7	70
7/9/1992	Webb Plant Finished Water	cis-1,2-Dichloroethylene	17.8	70
10/9/1992		cis-1,2-Dichloroethylene	12.7	70
	Webb Plant Finished Water	cis-1,2-Dichloroethylene	20.6	70
7/6/1993	Webb Plant Finished Water	cis-1,2-Dichloroethylene	22.6	70
11/10/1993	Webb Plant Finished Water	cis-1,2-Dichloroethylene	26.2	70
2/8/1994	Webb Plant Finished Water	cis-1,2-Dichloroethylene	3	70
7/12/1994	Webb Plant Finished Water	cis-1,2-Dichloroethylene	2.9	70
1/13/1995	Webb Plant Finished Water	cis-1,2-Dichloroethylene	2.9	70
7/3/1995	Webb Plant Finished Water	cis-1,2-Dichloroethylene	4.1	70
10/6/1995	Webb Plant Finished Water	cis-1,2-Dichloroethylene	11	70
1/17/1996	Webb Plant Finished Water	cis-1,2-Dichloroethylene	6.9	70
7/7/1996	Webb Plant Finished Water	cis-1,2-Dichloroethylene	18	70
10/8/1996	Webb Plant Finished Water	cis-1,2-Dichloroethylene	2	70
1/14/1997	Webb Plant Finished Water	cis-1,2-Dichloroethylene	5.2	70
12/7/1999	Webb Plant Finished Water	cis-1,2-Dichloroethylene	0.5	70
1/17/2001	Webb Plant Finished Water	cis-1,2-Dichloroethylene	10.9	70
2/11/2001	Webb Plant Finished Water	cis-1,2-Dichloroethylene	13.8	70
3/18/2001	Webb Plant Finished Water	cis-1,2-Dichloroethylene	18.7	70
4/24/2001	Webb Plant Finished Water	cis-1,2-Dichloroethylene	1.3	70
8/28/2001	Webb Plant Finished Water	cis-1,2-Dichloroethylene	13.8	70
10/9/2001	Webb Plant Finished Water	cis-1,2-Dichloroethylene	11.6	
2/11/2002	Webb Plant Finished Water	cis-1,2-Dichloroethylene		70
3/28/2002	Webb Plant Finished Water	cis-1,2-Dichloroethylene	9.8	70
12/17/2003	Webb Plant Finished Water		13.3	70
7/21/2004	Webb Plant Finished Water	cis-1,2-Dichloroethylene cis-1,2-Dichloroethylene	29.2	70
5/18/2005	Webb Plant Finished Water		22.3	70
5/10/2006	Webb Plant Finished Water	cis-1,2-Dichloroethylene	20.9	70
1/27/1989	Webb Well 2	cis-1,2-Dichloroethylene	60.5	70
4/24/1992	Webb Well 2	cis-1,2-Dichloroethylene	10.8	70
7/9/1992		cis-1,2-Dichloroethylene	0.7	70
	Webb Well 2	cis-1,2-Dichloroethylene	3.4	70
10/9/1992	Webb Well 2	cis-1,2-Dichloroethylene	7.8	70
1/28/1993	Webb Well 2	cis-1,2-Dichloroethylene	17	70
4/8/1993	Webb Well 2	cis-1,2-Dichloroethylene	17.1	70
7/6/1993	Webb Well 2	cis-1,2-Dichloroethylene	10.6	70
11/10/1993	Webb Well 2	cis-1,2-Dichloroethylene	13.6	70
2/8/1994	Webb Well 2	cis-1,2-Dichloroethylene	7.9	70
10/13/1994	Webb Well 2	cis-1,2-Dichloroethylene	45	70
1/13/1995	Webb Well 2	cis-1,2-Dichloroethylene	33	70
7/3/1995	Webb Well 2	cis-1,2-Dichloroethylene	5.7	70
10/6/1995	Webb Well 2	cis-1,2-Dichloroethylene	45	70
1/17/1996	Webb Well 2	cis-1,2-Dichloroethylene	17	70
4/19/1996	Webb Well 2	cis-1,2-Dichloroethylene	32	70
7/7/1996	Webb Well 2	cis-1,2-Dichloroethylene	21	70
11/15/1996	Webb Well 2	cis-1,2-Dichloroethylene	44	70
1/21/1997	Webb Well 2	cis-1,2-Dichloroethylene	39	70
4/9/1997	Webb Well 2	cis-1,2-Dichloroethylene	51	70
7/8/1997	Webb Well 2	cis-1,2-Dichloroethylene	55	70
7/17/2000	Webb Well 2	cis-1,2-Dichloroethylene	77.8	
1/30/2001	Webb Well 2			70
8/28/2001	Webb Well 2	cis-1,2-Dichloroethylene	53.7	70
6/14/2006		cis-1,2-Dichloroethylene	121.9	70
8/1/2006	Webb Well 2	cis-1,2-Dichloroethylene	25.2	70
11/8/2006	Webb Well 2	cis-1,2-Dichloroethylene	106.4	70
1 1/0/20001	Webb Well 2	cis-1,2-Dichloroethylene	24.3	70

IN5241005-WEBB-VOC's.xls

1/23/2007	Webb Well 2	cis-1,2-Dichloroethylene	60	70
4/18/2007	Webb Well 2	cis-1,2-Dichloroethylene	38.4	70
7/25/2007	Webb Well 2	cis-1,2-Dichloroethylene	96.2	70
6/14/1988	Webb Well 3	cis-1,2-Dichloroethylene	5.9	70
8/10/1988	Webb Well 3	cis-1,2-Dichloroethylene	1.8	70
4/15/1989	Webb Well 3	cis-1,2-Dichloroethylene	10.9	70
9/18/1989	Webb Well 3	cis-1,2-Dichloroethylene	18.2	70
11/3/1989	Webb Well 3	cis-1,2-Dichloroethylene	27.6	70
1/17/1990	Webb Well 3	cis-1,2-Dichloroethylene	15.2	70
4/25/1990	Webb Well 3	cis-1,2-Dichloroethylene	32.3	
8/13/1990	Webb Well 3	cis-1,2-Dichloroethylene	41.1	70
2/4/1991	Webb Well 3	cis-1,2-Dichloroethylene	59.9	70
4/8/1991	Webb Well 3			70
5/8/1991	Webb Well 3	cis-1,2-Dichloroethylene	48.2	70
7/17/1991		cis-1,2-Dichloroethylene	49.5	70
	Webb Well 3	cis-1,2-Dichloroethylene	71.4	70
8/30/1991	Webb Well 3	cis-1,2-Dichloroethylene	77.3	70
1/10/1992	Webb Well 3	cis-1,2-Dichloroethylene	109	70
2/27/1992	Webb Well 3	cis-1,2-Dichloroethylene	73.8	70
4/24/1992	Webb Well 3	cis-1,2-Dichloroethylene	69.2	70
7/9/1992	Webb Well 3	cis-1,2-Dichloroethylene	64	70
10/9/1992	Webb Well 3	cis-1,2-Dichloroethylene	89.9	70
1/28/1993	Webb Well 3	cis-1,2-Dichloroethylene	94.5	70
4/8/1993	Webb Well 3	cis-1,2-Dichloroethylene	80.6	70
7/6/1993	Webb Well 3	cis-1,2-Dichloroethylene	101	70
11/10/1993	Webb Well 3	cis-1,2-Dichloroethylene	97.2	70
2/8/1994	Webb Well 3	cis-1,2-Dichloroethylene	96.4	70
10/13/1994	Webb Well 3	cis-1,2-Dichloroethylene	81	70
1/13/1995	Webb Well 3	cis-1,2-Dichloroethylene	93	70
7/3/1995	Webb Well 3	cis-1,2-Dichloroethylene	16	70
10/6/1995	Webb Well 3	cis-1,2-Dichloroethylene	81	70
1/17/1996	Webb Well 3	cis-1,2-Dichloroethylene	95	70
4/30/1996	Webb Well 3	cis-1,2-Dichloroethylene	85	70
7/7/1996	Webb Well 3	cis-1,2-Dichloroethylene	83	70
10/8/1996	Webb Well 3	cis-1,2-Dichloroethylene	70	
1/21/1997	Webb Well 3	cis-1,2-Dichloroethylene		70
4/9/1997	Webb Well 3		6.3	70
7/8/1997	Webb Well 3	cis-1,2-Dichloroethylene	6.5	70
12/5/1999	Webb Well 3	cis-1,2-Dichloroethylene	13.8	70
7/17/2000	Webb Well 3	cis-1,2-Dichloroethylene	61	70
1/30/2001		cis-1,2-Dichloroethylene	9.4	70
	Webb Well 3	cis-1,2-Dichloroethylene	2.9	70 -
8/28/2001	Webb Well 3	cis-1,2-Dichloroethylene	missing data	70
6/14/2006	Webb Well 3	cis-1,2-Dichloroethylene	98.5	70
8/1/2006	Webb Well 3	cis-1,2-Dichloroethylene	15.6	70
11/8/2006	Webb Well 3	cis-1,2-Dichloroethylene	218.4	70
1/23/2007	Webb Well 3	cis-1,2-Dichloroethylene	25.7	70
4/18/2007	Webb Well 3	cis-1,2-Dichloroethylene	38.4	70
7/25/2007	Webb Well 3	cis-1,2-Dichloroethylene	75.1	70
4/19/1996	Webb Well 5	cis-1,2-Dichloroethylene	4.3	70
7/7/1996	Webb Well 5	cis-1,2-Dichloroethylene	3.5	70
10/8/1996	Webb Well 5	cis-1,2-Dichloroethylene	0.7	70
11/8/2006	Webb Well 5	cis-1,2-Dichloroethylene	1.5	70
1/10/1992	Webb Plant Finished Water	trans-1,2-Dichloroethylene	0.6	100
2/27/1992	Webb Plant Finished Water	trans-1,2-Dichloroethylene	0.6	100
4/24/1992	Webb Plant Finished Water	trans-1,2-Dichloroethylene		
7/9/1992	Webb Plant Finished Water	trans-1,2-Dichloroethylene	0.9	100
10/9/1992	Webb Plant Finished Water		0.6	100
7/6/1993		trans-1,2-Dichloroethylene	1.1	100
	Webb Plant Finished Water	trans-1,2-Dichloroethylene	1	100
11/10/1993	Webb Plant Finished Water	trans-1,2-Dichloroethylene	1.6	100
7/7/1996	Webb Plant Finished Water	trans-1,2-Dichloroethylene	0.9	100
2/11/2001	Webb Plant Finished Water	trans-1,2-Dichloroethylene	0.6	100
3/18/2001	Webb Plant Finished Water	trans-1,2-Dichloroethylene	0.7	100
8/28/2001	Webb Plant Finished Water	trans-1,2-Dichloroethylene	0.6	100
3/28/2002	Webb Plant Finished Water	trans-1,2-Dichloroethylene	0.5	100
12/17/2003	Webb Plant Finished Water	trans-1,2-Dichloroethylene	1.5	100

IN5241005-WEBB-VOC's.xls

7/21/2004	Webb Plant Finished Water	trans-1,2-Dichloroethylene	1.2	100
5/18/2005	Webb Plant Finished Water	trans-1,2-Dichloroethylene	10	100 100
5/10/2006	Webb Plant Finished Water	trans-1,2-Dichloroethylene	3.1	100
10/13/1994	Webb Well 2	trans-1,2-Dichloroethylene	0.8	100
10/6/1995	Webb Well 2	trans-1,2-Dichloroethylene	0.9	100
1/17/1996	Webb Well 2	trans-1,2-Dichloroethylene	0.6	100
4/19/1996	Webb Well 2	trans-1,2-Dichloroethylene	0.7	100
7/7/1996	Webb Well 2	trans-1,2-Dichloroethylene	0.5	100
11/15/1996	Webb Well 2	trans-1,2-Dichloroethylene	1.2	100
1/21/1997	Webb Well 2	trans-1,2-Dichloroethylene	1.1	100
4/9/1997	Webb Well 2	trans-1,2-Dichloroethylene	1.5	100
7/8/1997	Webb Well 2	trans-1,2-Dichloroethylene	1.9	100
7/17/2000	Webb Well 2	trans-1,2-Dichloroethylene	4.4	100
1/30/2001	Webb Well 2	trans-1,2-Dichloroethylene	2.8	100
8/28/2001	Webb Well 2	trans-1,2-Dichloroethylene	6.7	100
6/14/2006	Webb Well 2	trans-1,2-Dichloroethylene	2.6	100
8/1/2006	Webb Well 2	trans-1,2-Dichloroethylene	7.9	100
11/8/2006	Webb Well 2	trans-1,2-Dichloroethylene	1.8	100
1/23/2007	Webb Well 2	trans-1,2-Dichloroethylene	4.8	100
4/18/2007	Webb Well 2	trans-1,2-Dichloroethylene	3.1	100
7/25/2007	Webb Well 2	trans-1,2-Dichloroethylene	9.3	100
11/3/1989	Webb Well 3	trans-1,2-Dichloroethylene	0.8	100
4/25/1990	Webb Well 3	trans-1,2-Dichloroethylene	0.8	100
8/13/1990	Webb Well 3	trans-1,2-Dichloroethylene	1.3	100
2/4/1991	Webb Well 3	trans-1,2-Dichloroethylene	3.3	100
4/8/1991	Webb Well 3	trans-1,2-Dichloroethylene	1.6	100
5/8/1991	Webb Well 3	trans-1,2-Dichloroethylene	3.6	100
7/17/1991	Webb Well 3	trans-1,2-Dichloroethylene	4	100
8/30/1991	Webb Well 3	trans-1,2-Dichloroethylene	5.2	100
1/10/1992	Webb Well 3	trans-1,2-Dichloroethylene	5.8	100
2/27/1992	Webb Well 3	trans-1,2-Dichloroethylene	3.8	100
4/24/1992	Webb Well 3	trans-1,2-Dichloroethylene	5.4	100
7/9/1992	Webb Well 3	trans-1,2-Dichloroethylene	4.6	100
10/9/1992	Webb Well 3	trans-1,2-Dichloroethylene	6.3	100
1/28/1993	Webb Well 3	trans-1,2-Dichloroethylene	6.8	100
4/8/1993	Webb Well 3	trans-1,2-Dichloroethylene	5.9	100
7/6/1993	Webb Well 3	trans-1,2-Dichloroethylene	7.7	100
11/10/1993	Webb Well 3	trans-1,2-Dichloroethylene	7.1	100
10/13/1994	Webb Well 3	trans-1,2-Dichloroethylene	5.1	100
10/6/1995	Webb Well 3	trans-1,2-Dichloroethylene	8	100
1/17/1996	Webb Well 3	trans-1,2-Dichloroethylene	9.1	100
4/30/1996	Webb Well 3	trans-1,2-Dichloroethylene	6.2	100
7/7/1996	Webb Well 3	trans-1,2-Dichloroethylene	5.5	100
10/8/1996	Webb Well 3	trans-1,2-Dichloroethylene	5	100
4/9/1997	Webb Well 3	trans-1,2-Dichloroethylene	0.6	100
7/8/1997	Webb Well 3	trans-1,2-Dichloroethylene	1.1	100
12/5/1999	Webb Well 3	trans-1,2-Dichloroethylene	6.7	100
7/17/2000	Webb Well 3	trans-1,2-Dichloroethylene	1.1	100
8/28/2001	Webb Well 3	trans-1,2-Dichloroethylene	missing data	100
6/14/2006	Webb Well 3	trans-1,2-Dichloroethylene	8.3	100
8/1/2006	Webb Well 3	trans-1,2-Dichloroethylene	1.6	100
11/8/2006	Webb Well 3	trans-1,2-Dichloroethylene	15.7	100
1/23/2007	Webb Well 3	trans-1,2-Dichloroethylene	2.6	100
4/18/2007	Webb Well 3	trans-1,2-Dichloroethylene	3.5	100
7/25/2007	Webb Well 3	trans-1,2-Dichloroethylene	6	100
7/7/1996	Webb Well 5	trans-1,2-Dichloroethylene	0.5	100
10/8/1996	Webb Monitoring Well	Trichloroethylene	1	5
10/23/1996	Webb Monitoring Well	Trichloroethylene	3.3	5
1/21/1997	Webb Monitoring Well	Trichloroethylene	2.5	5
4/9/1997	Webb Monitoring Well	Trichloroethylene	7.1	
7/8/1997	Webb Monitoring Well	Trichloroethylene	13	5 5
				· · · · · · · · · · · · · · · · · · ·

Drinking Water Branch

Non-Coliform Sample Results

Federal Type:

State Type:

INDIANA AMERICAN WATER -JOHNSON COUNTY JOHNSON

Principal County Served : Status :

Water System Name: Water System No.:

IN5241005

Return Links

Non-Coliform Samples

Analyte List

Water System Detail

Water Systems

Water System Search

County Map

Glossary

		•		
GW	01-01-1976	05-10-2006		
Primary Source:	Activity Date:	Sollection Date:		
Prim	Activ	Colle		
JOHNSON	Ą	RV-0602-03	.5.	
incipal County Served: JOHNSON		No. :		
incipal Co	atus:	b Sample		

Analyte Code	Analyte Name	Method Code	Less than Indicator		Reporting Level	Level Reporting Concentration Period Period End Regin Date Date	Monitoring Period Begin Date	Monitoring Period End Date
2378	1,2,4- TRICHLOROBENZENE	524.2	Y	MDL	.5 UG/L	UG/L	01-01-2005	12-31-2007
2380	CIS-1,2- DICHLOROETHYLENE	524.2	Z	MRL	.5 UG/L	60.5 UG/L	01-01-2005	12-31-2007
2955	XYLENES, TOTAL	524.2	Υ	MDL	.5 UG/L	T/90	01-01-2005	12-31-2007
2964	DICHLOROMETHANE	524.2	Y	MDL	S UG/L	UG/L	01-01-2005	12-31-2007
	O-DICHLOROBENZENE	524.2	Ā	MDL	S UG/L	UG/L	01-01-2005	12-31-2007
5968	P-DICHLOROBENZENE	524.2	¥	MDL	.5 UG/L	UG/L	01-01-2005	12-31-2007
2976	VINYL CHLORIDE	524.2	Ā	MDL	.5 UG/L	ng/L	01-01-2005	12-31-2007
2977	1,1-DICHLOROETHYLENE	524.2	×	MDL	.5 UG/L	UG/L	01-01-2005	12-31-2007
2979	TRANS-1,2- DICHLOROETHYLENE	524.2	Z	MRL	.5 UG/L	3.1 UG/L	01-01-2005	12-31-2007
2980	1,2-DICHLOROETHANE	524.2	×	MDL	.5 UG/L	llnu	01-01-2005	12-31-2007
2981	1,1,1-TRICHLOROETHANE	524.2	Y	MDL	.5 UG/L	UG/L	01-01-2005	12-31-2007
2982	CARBON TETRACHLORIDE	524.2	X	MDL	.s UG/L	NG/L	01-01-2005	12-31-2007
2983	1,2-DICHLOROPROPANE	524.2	Y	MDL	.5 UG/L	UG/L	01-01-2005	12-31-2007
1	TRICHLOROETHYLENE	524 2	Y	TOW	.5 UG/L	UG/L	01-01-2005	12-31-2007
2985	1,1,2-TRICHLOROETHANE	524.2	Y	MDL	.5 UG/L	UG/L	01-01-2005	12-31-2007
2987	TETRACHLOROETHYLENE	524.2	Χ,	MDL	.5 UG/L	T/DN	01-01-2005	12-31-2007
- 1	CHLOROBENZENE	524.2	Y	MDL	.5 UG/L	UG/L	01-01-2005	12-31-2007
2990	BENZENE	524.2	· Y	MDL	.5 UG/L	T/DA	01-01-2005	12-31-2007
2991	TOLUENE	524.2	Y	MDL	7/DA 5'	T/BN	01-01-2005	12-31-2007
2992	ETHYLBENZENE	524.2	Y	MDL	.s ug/L	UG/L	01-01-2005	12-31-2007
2996	STYRENE	524.2	Y	MDL	.5 UG/L	UG/L	01-01-2005	12-31-2007

Drinking Water Branch

Non-Coliform Sample Results

Federal Type:

INDIANA AMERICAN WATER -

IN5241005

Water System No.:

Return Links

Non-Colliform Samples

Analyte List

Water System Detail

Water Systems

Water System Search

County Map

Glossary

Water System Name: IOHNSON COUNTY	Principal County Served: JOHNSON	•	Lab Sample No.: RV-2380032802	
INDIANA AMERICAN WATER - JOHNSON COUNTY			802	
State Type:	Primary Source:	Activity Date:	Collection Date:	
O	GW	01-01-1976	03-28-2002	

Analyte Code	Analyte Name	Method t Code Ind	ess han icator	Level Type	Reporting Level	Level Reporting Concentration Monitoring Monitoring Type Level level Begin Date Date	Monitoring Monitor Period Period E Begin Date Date	MonitoringMonitoring Period Period End Begin Date Date
2380	CIS-1,2- DICHLOROETHYLENE	524.2	Z		0 mull	13.3 UG/L	01-01-2002 12-31-2004	12-31-2004

Total Number of Records Fetched = 1

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Drinking Water Branch

Non-Coliform Sample Results

Return Links

Non-Coliform Samples

Analyte List

Water System Detail

Water Systems

County Map

Glossary

Method Code 524.2 DICHLOROETHYLENE Analyte Name TRANS-1,2-Analyte Code 2979 Water System Search

Reporting Concentration Monitoring Monitoring

01-01-1976

Primary Source : Activity Date : Collection Date :

Federal Type:

State Type:

Water System Name: IOHNSON COUNTY Frincipal County Served: JOHNSON

IN5241005

Water System No.:

RV-2979032802

Lab Sample No.:

Status:

03-28-2002

12-31-2004

01-01-2002

0.5 UG/L

0 null

Begin Date

level

Level

Indicator

Z

than

Less

Level Type

Total Number of Records Fetched = 1

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION V SUPERFUND DIVISION

DATE:	
SUBJECT:	Review of Data Received for Review on: October 27, 2010
FROM:	Timothy Prendiville, Supervisor (SR-6J) Superfund Contract Management Section
TO:	Data User:IDEM Email address:mjaworsk@idem.in.gov
We have revie	wed the data for the following case:
Site Name: <u>V</u>	Vebb Well Field (IN)
Case Number:	40646 SDG Number: E2RL9
Number and T	Type of Samples: 20 waters (trace volatile)
Sample Numb	ers: <u>E2RL9, E2RM0 – E2RM6, E2RM9, E2RN0 – E2RN5, E2RN7, E2RN8, E2RP0 – E2RP2</u>
Laboratory: _S	ShealyHrs for Review:
Following are	our findings:

CC: Howard Pham Region 5 TPO

Mail Code: SRT-5J

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Below is a summary of the out-of-control audits and the possible effects on the data for this case:

Twenty (20) water samples labeled E2RL9, E2RM0 – E2RM6, E2RM9, E2RN0 – E2RN5, E2RN7, E2RN8, E2RP0 – E2RP2 were collected on 10/05/2010. The samples were received intact by Shealy Environmental lab located in West Columbia, SC on 10/06/2010. Nine (9) samples, E2RL9, E2RM5, E2RN0 – E2RN5 and E2RN7 were received at the proper shipping temperature range of 2 - 6°C. The cooler temperature for the remaining eleven (11) samples E2RM0 – E2RM4, E2RM6, E2RM9, E2RN8, E2RP0 – E2RP2 was 8°C upon receipt. Although the cooler containing these samples was outside the required temperature range, no sample results are qualified for exceeded temperature. All samples were analyzed for the trace volatile target compounds. All samples were analyzed according to CLP SOW SOM01.2 (10/2006) and reviewed according to the NFG for SOM01.2 and the SOP for ESAT 5/TechLaw Validation of Contract Laboratory Program Organic Data (Version 2.4).

Sample E2RN4 was designated by the samplers to be used for laboratory QC, i.e. MS / MSD analyses.

No samples were identified as field blanks or field duplicates.

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1. HOLDING TIME

No problems were found.

2. GC/MS TUNING AND GC INSTRUMENT PERFORMANCE

No problems were found.

3. CALIBRATION

The following volatile samples are associated with an initial calibration with relative response factors (RRFs) outside criteria. 1,2-Dichloropropane was not detected in the samples. Non-detected 1,2-Dichloropropane is qualified "R".

E2RL9, E2RM0, E2RM1, E2RM2, E2RM3, E2RM4, E2RM5, E2RM6, E2RM9, E2RN0, E2RN1, E2RN2, E2RN3, E2RN4, E2RN4MS, E2RN4MSD, E2RN5, E2RN7, E2RN8, E2RP0, E2RP1, VBLKVB, VBLKVE 1,2-Dichloropropane

The following trace volatile samples are associated with an initial calibration percent relative standard deviation (%RSD) outside criteria. 1,2-Dichloropropane was not detected in the samples. Non-detected compounds are qualified as above.

E2RL9, E2RM0, E2RM1, E2RM2, E2RM3, E2RM4, E2RM5, E2RM6, E2RM9, E2RN0, E2RN1, E2RN2, E2RN3, E2RN4, E2RN4MS, E2RN4MSD, E2RN5, E2RN7, E2RN8, E2RP0, E2RP1, VBLKVB, VBLKVE 1,2-Dichloropropane

The following trace volatile samples are associated with an opening CCV percent difference (%D) outside criteria. The compounds were not detected in the samples. Non-detected compounds are qualified "UJ".

E2RM0, E2RM1, E2RM2, E2RM3, E2RM4, E2RM6, E2RM9, E2RN1, E2RN2, E2RN3, E2RN4, E2RN4MSD, E2RN5, E2RN7, E2RN8, E2RP0, E2RP1, VBLKVE
Carbon tetrachloride, Bromoform

The following trace volatile samples are associated with an opening CCV in which a DMC exceeded percent difference (%D) criteria. Detected and non-detected compounds are not qualified based on the %D data of the DMC alone.

E2RM0, E2RM1, E2RM2, E2RM3, E2RM4, E2RM6, E2RM9, E2RN1, E2RN2, E2RN3, E2RN4, E2RN4MS, E2RN4MSD, E2RN5, E2RN7, E2RN8, E2RP0, E2RP1, VBLKVE

Benzene-d₆, trans-1,3-dichloropropene-d₄

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4. BLANKS

The following trace volatile samples have common contaminant analyte concentrations reported less than 2X the CRQL. The associated storage blank has common contaminant analyte concentrateon is less than 2X the concentration criteria. Detected compounds are qualified "U". Non-detected compounds are not qualified. Reported sample concentrations have been elevated to 2X the CRQL.

E2RM4, E2RM6, E2RP0, E2RP1 Acetone

5. DEUTERATED MONITORING COMPOUND AND SURROGATE RECOVERY

The following trace volatile samples have one or more DMC/SMC recovery values is less than the primary lower limit but greater than or equal to the expanded lower limit of the criteria window. Detected compounds are qualified "J". Non-detected compounds are qualified "UJ". Some non-detects are ultimately qualified as "R" because not all RRF criteria was met.

E2RL9

Cyclohexane, Trichloroethene, Methylcyclohexane, 1,2-Dichloropropane, Bromodichloromethane, Toluene, Tetrachloroethene, Chlorobenzene, Ethylbenzene, o-Xylene, m,p-Xylene, Styrene, Isopropylbenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,2-Dichlorobenzene, 1,2,4-Trichlorobenzene, 1,2,3-Trichlorobenzene

E2RM5, E2RN1, E2RN3

Cyclohexane, Methylcyclohexane, 1,2-Dichloropropane, Bromodichloromethane

E2RN0

Cyclohexane, Methylcyclohexane, 1,2-Dichloropropane, Bromodichloromethane, cis-1,3-Dichloropropene, trans-1,3-Dichloropropene, 1,1,2-Trichloroethane

E2RP0, E2RP1

Chlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,2-Dichlorobenzene, 1,2,4-Trichlorobenzene, 1,2,3-Trichlorobenzene

E2RP2

Trichlorofluoromethane, 1,1,2-Trichloro-1,2,2,-trifluoroethane, Acetone, Methyl Acetate, Methylene Chloride, Methyl tert-Butyl Ether, 2-Butanone, 1,1,1-Trichloroethane, Carbon Tetrachloride, 1,2-Dichloroethane, 1,2-Dibromoethane, 1,1,2,2-Tetrachloroethane, 1,2-Dibromo-3-chloropropane

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E2RP2RE

Dichlorodifluoromethane, Chloromethane, Vinyl chloride, Bromomethane, Chloroethane, 1,1-Dichloroethene, Carbon disulfide, trans-1,2-Dichloroethene, 1,1-Dichloroethane, cis-1,2-Dichloroethene, Bromochloromethane, Chloroform, Cyclohexane, Benzene, Trichloroethene, Methylcyclohexane, 1,2-Dichloropropane, Bromodichloromethane, Toluene, Tetrachloroethene, Dibromochloromethane, Chlorobenzene, Ethylbenzene, o-Xylene, m,p-Xylene, Styrene, Bromoform, Isopropylbenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,2-Dichlorobenzene, 1,2,4-Trichlorobenzene, 1,2,3-Trichlorobenzene

The following trace volatile samples have DMC/SMC recoveries below the expanded lower limit of the criteria window. Detected compounds are qualified "J". Non-detected compounds are qualified "R".

E2RP2

Dichlorodifluoromethane, Chloromethane, Vinyl chloride, Bromomethane, Chloroethane, 1,1-Dichloroethene, Carbon disulfide, trans-1,2-Dichloroethene, 1,1-Dichloroethane, cis-1,2-Dichloroethene, Bromochloromethane, Chloroform, Cyclohexane, Benzene, Trichloroethene, Methylcyclohexane, 1,2-Dichloropropane, Bromodichloromethane, cis-1,3-Dichloropropene, Toluene, trans-1,3-Dichloropropene, 1,1,2-Trichloroethane, Tetrachloroethene, Dibromochloromethane, Ethylbenzene, o-Xylene, m,p-Xylene, Styrene, Bromoform, Isopropylbenzene

6A. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Sample E2RN4 was designated by the samplers to be used for laboratory QC, i.e. MS / MSD analyses.

No problems were found.

6B. LABORATORY CONTROL SAMPLE

Not applicable to this analysis.

7. FIELD BLANK AND FIELD DUPLICATE

No samples were identified as field blanks or field duplicates.

8. INTERNAL STANDARDS

No problems were found.

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9. COMPOUND IDENTIFICATION

After reviewing the mass spectra and chromatograms it appears that all volatile compounds were properly identified.

10. COMPOUND QUANTITATION AND REPORTED DETECTION LIMITS

The following volatile samples have analyte concentrations below the quantitation limit (CRQL). Detected compounds are qualified "J".

E2RM0, E2RM9, E2RN0, E2RN1, E2RN4, E2RN4MS, E2RN4MSD, E2RN5 Chloromethane

E2RM2, E2RM3 1,1-Dichloroethane

E2RM5

Chloromethane, Methylene chloride

E2RM6

Methylene chloride

E2RP0

Carbon disulfide, Benzene, Trichloroethene, Ethylbenzene, o-Xylene, m,p-Xylene

E2RP1

Benzene, Ethylbenzene, o-Xylene, m,p-Xylene

E2RP2

Methylcyclohexane, Toluene

E2RP2RE

Chloromethane, Benzene, o-Xylene, m,p-Xylene

VHBLK01

Acetone, cis-1,3-Dichloropropene

11. SYSTEM PERFORMANCE

GC/MS baseline indicated acceptable performance.

12. ADDITIONAL INFORMATION

None.

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Laboratory: Shealy

CADRE Data Qualifier Sheet

Qualifiers	Data Qualifier Definitions
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the action limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification.
NJ	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification and the associated numerical value represents its approximate concentration.
R	The data are unusable. (The compound may or may not be present.)

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Case #: 40646 SDG : E2RL9
Site : WEBB WELLFIELD

Site:WEBB WELLFIELDNumber of Soil Samples:0Lab.:SHEALYNumber of Water Samples:20Reviewer:Number of Sediment Samples:0

Date:

Sample Number :	E2RL9		E2RM0		E2RM1		E2RM2		E2RM3	
Sampling Location :	GW2		GW3		GW1		GW7		GW8	
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	10/5/2010		•		ug/L 10/5/2010		10/5/2010		10/5/2010	
Time Sampled :	10/0/2010	10/3/2010			10/0/2010		10/0/2010		10/0/2010	
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH:	2		2		2		2		2	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloromethane	0.75		0.36	J	0.56		0.50	U	0.50	U
Vinyl chloride	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromomethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Trichlorofluoromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1-Dichloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2-Trichloro-1,2,2-trifluoro	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Acetone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Carbon Disulfide	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Methyl acetate	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Methylene chloride	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
trans-1,2-Dichloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Methyl tert-butyl ether	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1-Dichloroethane	0.50	U	0.50	U	0.50	U	0.37	J	0.36	J
cis-1,2-Dichloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
2-Butanone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Bromochloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloroform	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,1-Trichloroethane	0.50	U	0.50	U	0.50	U	6.7		6.5	
Cyclohexane	0.50	UJ	0.50	U	0.50	U	0.50	U	0.50	U
Carbon tetrachloride	0.50	U	0.50	UJ	0.50	UJ	0.50	UJ	0.50	UJ
Benzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Trichloroethene	0.50	UJ	0.50	U	0.50	U	0.50	U	0.50	U
Methylcyclohexane	0.50	UJ	0.50		0.50	U	0.50	U	0.50	U
1,2-Dichloropropane	0.50	R	0.50	R	0.50	R	0.50	R	0.50	R
Bromodichloromethane	0.50	UJ	0.50	U	0.50	U	0.50	U	0.50	U
cis-1,3-Dichloropropene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
4-Methyl-2-pentanone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Toluene	0.50	UJ	0.50	U	0.50	U	0.50	U	0.50	U
trans-1,3-Dichloropropene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2-Trichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U

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Case #: 40646 SDG : E2RL9 Site : WEBB WELLFIELD

Lab.: SHEALY

Sample Number :	E2RL9		E2RM0		E2RM1		E2RM2		E2RM3	
Sampling Location :	GW2		GW3		GW1		GW7		GW8	
Matrix :	Water		Water	Water		Water		Water		
Units:	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	10/5/2010		10/5/2010		10/5/2010		10/5/2010		10/5/2010	
Time Sampled :										
%Moisture:	N/A		N/A		N/A		N/A		N/A	
pH:	2		2		2		2		2	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Tetrachloroethene	0.50	UJ	0.50	U	0.50	U	0.50	U	0.50	U
2-Hexanone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Dibromochloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dibromoethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chlorobenzene	0.50	UJ	0.50	U	0.50	U	0.50	U	0.50	U
Ethylbenzene	0.50	UJ	0.50	U	0.50	U	0.50	U	0.50	U
o-Xylene	0.50	UJ	0.50	U	0.50	U	0.50	U	0.50	U
m,p-Xylene	0.50	UJ	0.50	U	0.50	U	0.50	U	0.50	U
Styrene	0.50	UJ	0.50	U	0.50	U	0.50	U	0.50	U
Bromoform	0.50	U	0.50	UJ	0.50	UJ	0.50	UJ	0.50	UJ
Isopropylbenzene	0.50	UJ	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2,2-Tetrachloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,3-Dichlorobenzene	0.50	UJ	0.50	U	0.50	U	0.50	U	0.50	U
1,4-Dichlorobenzene	0.50	UJ	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dichlorobenzene	0.50	UJ	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dibromo-3-chloropropar	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2,4-Trichlorobenzene	0.50	UJ	0.50	U	0.50	U	0.50	U	0.50	U
1,2,3-Trichlorobenzene	0.50	UJ	0.50	U	0.50	U	0.50	U	0.50	U

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Case #: 40646 SDG : E2RL9
Site : WEBB WELLFIELD

Lab.: SHEALY

Reviewer : Date :

Sample Number :	E2RM4		E2RM5		E2RM6		E2RM9		E2RN0	
Sampling Location :	GW9		GW20		GW21		GW5		GW4	
Matrix :	Water									
Units:	ug/L									
Date Sampled :	10/5/2010		10/5/2010		10/5/2010		10/5/2010		10/5/2010	
Time Sampled :			10/3/2010				10/3/2010			
%Moisture :	N/A									
pH:	2		2		2		2		2	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Trace Volatile Compound	Result	Flag								
Dichlorodifluoromethane	0.50	U								
Chloromethane	0.50	U	0.48	J	0.50	U	0.29	J	0.23	J
Vinyl chloride	0.50	U								
Bromomethane	0.50	U								
Chloroethane	0.50	U								
Trichlorofluoromethane	0.50	U								
1,1-Dichloroethene	0.50	U								
1,1,2-Trichloro-1,2,2-trifluor	0.50	U								
Acetone	5.0	U								
Carbon Disulfide	0.50	U								
Methyl acetate	0.50	U								
Methylene chloride	0.50	U	0.22	J	0.23	J	0.50	U	0.50	U
trans-1,2-Dichloroethene	0.50	U								
Methyl tert-butyl ether	0.50	U								
1,1-Dichloroethane	0.50	U								
cis-1,2-Dichloroethene	0.50	U								
2-Butanone	5.0	U								
Bromochloromethane	0.50	U								
Chloroform	0.50	U								
1,1,1-Trichloroethane	0.50	U								
Cyclohexane	0.50	U	0.50	UJ	0.50	U	0.50	U	0.50	UJ
Carbon tetrachloride	0.50	UJ	0.50	U	0.50	UJ	0.50	UJ	0.50	U
Benzene	0.50	U								
1,2-Dichloroethane	0.50	U								
Trichloroethene	0.50	U								
Methylcyclohexane	0.50	U	0.50	UJ	0.50	U	0.50	U	0.50	UJ
1,2-Dichloropropane	0.50		0.50	R	0.50	R	0.50	R	0.50	R
Bromodichloromethane	0.50	U	0.50	UJ	0.50	U	0.50	U	0.50	UJ
cis-1,3-Dichloropropene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	UJ
4-Methyl-2-pentanone	5.0	U								
Toluene	0.50	U								
trans-1,3-Dichloropropene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	UJ
1,1,2-Trichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	UJ

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Case #: 40646 SDG : E2RL9 Site : WEBB WELLFIELD

Lab.: SHEALY

Sample Number :	E2RM4		E2RM5		E2RM6		E2RM9		E2RN0	
Sampling Location :	GW9		GW20		GW21		GW5		GW4	
Matrix :	Water									
Units:	ug/L									
Date Sampled :	10/5/2010		10/5/2010		10/5/2010		10/5/2010		10/5/2010	
Time Sampled :										
%Moisture:	N/A									
pH:	2		2		2		2		2	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Trace Volatile Compound	Result	Flag								
Tetrachloroethene	0.50	U								
2-Hexanone	5.0	U								
Dibromochloromethane	0.50	U								
1,2-Dibromoethane	0.50	U								
Chlorobenzene	0.50	U								
Ethylbenzene	0.50	U								
o-Xylene	0.50	U								
m,p-Xylene	0.50	U								
Styrene	0.50	U								
Bromoform	0.50	UJ	0.50	U	0.50	UJ	0.50	UJ	0.50	U
Isopropylbenzene	0.50	U								
1,1,2,2-Tetrachloroethane	0.50	U								
1,3-Dichlorobenzene	0.50	U								
1,4-Dichlorobenzene	0.50	U								
1,2-Dichlorobenzene	0.50	U								
1,2-Dibromo-3-chloropropar	0.50	U								
1,2,4-Trichlorobenzene	0.50	U								
1,2,3-Trichlorobenzene	0.50	U								

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Case #: 40646 SDG : E2RL9
Site : WEBB WELLFIELD

Lab.: SHEALY

Reviewer : Date :

Sample Number :	E2RN1		E2RN2		E2RN3		E2RN4		E2RN4MS	E2RN4MS		
Sampling Location :	GW6		GW10		GW11		GW16		GW16			
Matrix :	Water		Water		Water		Water		Water			
Units :	ug/L		ug/L		ug/L		ug/L		ug/L			
Date Sampled :	10/5/2010		10/5/2010		10/5/2010		10/5/2010		3-			
Time Sampled :	10/0/2010		10/0/2010		10/0/2010		10/0/2010					
%Moisture :	N/A		N/A		N/A		N/A		N/A			
pH:	2		2		2		2		2			
Dilution Factor :	1.0		1.0		1.0		1.0		1.0			
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag		
Dichlorodifluoromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U		
Chloromethane	0.37	J	0.50	U	0.50	U	0.34	J	0.26	J		
Vinyl chloride	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U		
Bromomethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U		
Chloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U		
Trichlorofluoromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U		
1,1-Dichloroethene	0.50	U	0.50	U	0.50	U	0.50	U	5.3			
1,1,2-Trichloro-1,2,2-trifluor	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U		
Acetone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U		
Carbon Disulfide	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U		
Methyl acetate	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U		
Methylene chloride	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U		
trans-1,2-Dichloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U		
Methyl tert-butyl ether	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U		
1,1-Dichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U		
cis-1,2-Dichloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U		
2-Butanone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U		
Bromochloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U		
Chloroform	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U		
1,1,1-Trichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U		
Cyclohexane	0.50	UJ	0.50	U	0.50	UJ	0.50	U	0.50	U		
Carbon tetrachloride	0.50	UJ	0.50	UJ	0.50	UJ	0.50	UJ	0.50	UJ		
Benzene	0.50	U	0.50	U	0.50	U	0.50	U	5.0			
1,2-Dichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U		
Trichloroethene	0.50	U	0.50	U	0.50	U	0.50	U	5.0			
Methylcyclohexane	0.50	UJ	0.50	U	0.50	UJ	0.50	U	0.50	U		
1,2-Dichloropropane	0.50	R	0.50	R	0.50	R	0.50	R	0.50	R		
Bromodichloromethane	0.50	UJ	0.50	U	0.50	UJ	0.50	U	0.50	U		
cis-1,3-Dichloropropene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U		
4-Methyl-2-pentanone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U		
Toluene	0.50	U	0.50	U	0.50	U	0.50	U	4.9			
trans-1,3-Dichloropropene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U		
1,1,2-Trichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U		

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Case #: 40646 SDG : E2RL9 Site : WEBB WELLFIELD

Lab.: SHEALY

Sample Number :	E2RN1		E2RN2		E2RN3		E2RN4		E2RN4MS	
Sampling Location :	GW6		GW10		GW11		GW16		GW16	
Matrix:	Water		Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	10/5/2010		10/5/2010		10/5/2010		10/5/2010			
Time Sampled :										
%Moisture:	N/A		N/A		N/A		N/A		N/A	
pH:	2		2		2		2		2	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Tetrachloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
2-Hexanone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Dibromochloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dibromoethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	5.0	
Ethylbenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
o-Xylene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
m,p-Xylene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Styrene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromoform	0.50	UJ	0.50	UJ	0.50	UJ	0.50	UJ	0.50	UJ
Isopropylbenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2,2-Tetrachloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,3-Dichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,4-Dichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dibromo-3-chloropropar		U	0.50	U	0.50	U	0.50	U	0.50	U
1,2,4-Trichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2,3-Trichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U

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Case #: 40646 SDG : E2RL9
Site : WEBB WELLFIELD

Lab.: SHEALY

Reviewer : Date :

Sample Number :	E2RN4MS	D	E2RN5		E2RN7		E2RN8		E2RP0	
Sampling Location :	GW16		GW17		GW19		GW22		GW12	
Matrix:	Water		Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	3		_	10/5/2010		10/5/2010		10/5/2010		
Time Sampled :			10/0/2010				10/3/2010		10/5/2010	
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH:	2		2		2		2		2	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloromethane	0.27	J	0.26	J	0.50	U	0.50	U	0.52	
Vinyl chloride	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromomethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Trichlorofluoromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1-Dichloroethene	5.4		0.50	U	0.50	U	0.50	U	0.50	U
1,1,2-Trichloro-1,2,2-trifluor		U	0.50	U	0.50	U	0.50	U	0.50	U
Acetone	5.0	U	5.0	U	5.0	U	5.0	U	10	
Carbon Disulfide	0.50	U	0.50	U	0.50	U	0.50	U	0.40	J
Methyl acetate	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Methylene chloride	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
trans-1,2-Dichloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Methyl tert-butyl ether	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1-Dichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
cis-1,2-Dichloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.59	
2-Butanone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Bromochloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloroform	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,1-Trichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Cyclohexane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Carbon tetrachloride	0.50	UJ	0.50	UJ	0.50	UJ	0.50	UJ	0.50	UJ
Benzene	5.2		0.50	U	0.50	U	0.50	U	0.33	J
1,2-Dichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Trichloroethene	5.2		0.50	U	0.50	U	0.50	U	0.37	J
Methylcyclohexane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dichloropropane	0.50		0.50		0.50	R	0.50	R	0.50	R
Bromodichloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
cis-1,3-Dichloropropene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
4-Methyl-2-pentanone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Toluene	5.1		0.50	U	0.50	U	0.50	U	0.82	
trans-1,3-Dichloropropene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2-Trichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U

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Case #: 40646 SDG : E2RL9 Site : WEBB WELLFIELD

Lab.: SHEALY

Sample Number :	E2RN4MS	D	E2RN5		E2RN7		E2RN8		E2RP0	
Sampling Location :	GW16		GW17		GW19		GW22		GW12	
Matrix :	Water		Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :			10/5/2010		10/5/2010		10/5/2010		10/5/2010	
Time Sampled :										
%Moisture:	N/A		N/A		N/A		N/A		N/A	
pH:	2		2		2		2		2	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Trace Volatile Compound	Result			Flag	Result	Flag	Result	Flag	Result	Flag
Tetrachloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
2-Hexanone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Dibromochloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dibromoethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chlorobenzene	5.2		0.50	U	0.50	U	0.50	U	0.50	UJ
Ethylbenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.18	J
o-Xylene	0.50	U	0.50	U	0.50	U	0.50	U	0.14	J
m,p-Xylene	0.50	U	0.50	U	0.50	U	0.50	U	0.33	J
Styrene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromoform	0.50	UJ	0.50	UJ	0.50	UJ	0.50	UJ	0.50	UJ
Isopropylbenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2,2-Tetrachloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,3-Dichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	UJ
1,4-Dichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	UJ
1,2-Dichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	UJ
1,2-Dibromo-3-chloropropar	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2,4-Trichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	UJ
1,2,3-Trichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	UJ

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Case #: 40646 SDG : E2RL9
Site : WEBB WELLFIELD

Lab.: SHEALY

Reviewer : Date :

Sample Number :	E2RP1		E2RP2		E2RP2RE		VBLKVB		VBLKVE	
Sampling Location :	GW13		GW14		GW14					
Matrix :	Water		Water		Water		Water		Water	
Units :	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	10/5/2010		10/5/2010		ug/L		~g/ =		3-	
Time Sampled :				10/3/2010						
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH:	2		2		2		,, .		,,	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	0.50	U	0.50	R	0.50	UJ	0.50	U	0.50	U
Chloromethane	0.50	U	0.50	R	0.25	J	0.50	U	0.50	U
Vinyl chloride	0.50	U	0.50	R	0.50	UJ	0.50	U	0.50	U
Bromomethane	0.50	U	0.50	R	0.50	UJ	0.50	U	0.50	U
Chloroethane	0.50	U	0.50	R	0.50	UJ	0.50	U	0.50	U
Trichlorofluoromethane	0.50	U	0.50	UJ	0.50	U	0.50	U	0.50	U
1,1-Dichloroethene	0.50	U	0.50	R	0.50	UJ	0.50	U	0.50	U
1,1,2-Trichloro-1,2,2-trifluor	0.50	U	0.50	UJ	0.50	U	0.50	U	0.50	U
Acetone	5.0	U	5.0	UJ	5.0	U	5.0	U	5.0	U
Carbon Disulfide	0.50	U	0.50	R	0.50	UJ	0.50	U	0.50	U
Methyl acetate	0.50	U	0.50	UJ	0.50	U	0.50	U	0.50	U
Methylene chloride	0.50	U	0.50	UJ	0.50	U	0.50	U	0.50	U
trans-1,2-Dichloroethene	0.50	U	0.50	R	0.50	UJ	0.50	U	0.50	U
Methyl tert-butyl ether	0.50	U	0.50	UJ	0.50	U	0.50	U	0.50	U
1,1-Dichloroethane	0.50	U	0.50	R	0.50	UJ	0.50	U	0.50	U
cis-1,2-Dichloroethene	0.50	U	0.50	R	0.50	UJ	0.50	U	0.50	U
2-Butanone	5.0	U	5.0	UJ	5.0	U	5.0	U	5.0	U
Bromochloromethane	0.50	U	0.50	R	0.50	UJ	0.50	U	0.50	U
Chloroform	0.50	U	0.50	R	0.50	UJ	0.50	U	0.50	U
1,1,1-Trichloroethane	0.50	U	0.50	UJ	0.50	U	0.50	U	0.50	U
Cyclohexane	0.50	U	0.50	R	0.50	UJ	0.50	U	0.50	U
Carbon tetrachloride	0.50	UJ	0.50	UJ	0.50	U	0.50	U	0.50	UJ
Benzene	0.31	J	0.50	R	0.40	J	0.50	U	0.50	U
1,2-Dichloroethane	0.50	U	0.50	UJ	0.50	U	0.50	U	0.50	U
Trichloroethene	0.50	U	0.50	R	0.50	UJ	0.50	U	0.50	U
Methylcyclohexane	0.50	U	0.23	J	0.84	J	0.50	U	0.50	U
1,2-Dichloropropane	0.50	R	0.50	R	0.50	R	0.50	R	0.50	R
Bromodichloromethane	0.50	U	0.50	R	0.50	UJ	0.50	U	0.50	U
cis-1,3-Dichloropropene	0.50	U	0.50	R	0.50	U	0.50	U	0.50	U
4-Methyl-2-pentanone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Toluene	0.89		0.22	J	0.97	J	0.50	U	0.50	U
trans-1,3-Dichloropropene	0.50	U	0.50	R	0.50	U	0.50	U	0.50	U
1,1,2-Trichloroethane	0.50	U	0.50	R	0.50	U	0.50	U	0.50	U

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Case #: 40646 SDG : E2RL9 Site : WEBB WELLFIELD

Lab.: SHEALY

Sample Number :	E2RP1		E2RP2		E2RP2RE		VBLKVB		VBLKVE	
Sampling Location :	GW13		GW14		GW14					
Matrix :	Water		Water		Water		Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	10/5/2010		10/5/2010							
Time Sampled :										
%Moisture:	N/A		N/A		N/A		N/A		N/A	
pH:	2		2		2					
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Tetrachloroethene	0.50	U	0.50	R	0.50	UJ	0.50	U	0.50	U
2-Hexanone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Dibromochloromethane	0.50	U	0.50	R	0.50	UJ	0.50	U	0.50	U
1,2-Dibromoethane	0.50	U	0.50	UJ	0.50	U	0.50	U	0.50	U
Chlorobenzene	0.50	UJ	0.50	U	0.50	UJ	0.50	U	0.50	U
Ethylbenzene	0.23	J	0.50	R	0.50	UJ	0.50	U	0.50	U
o-Xylene	0.17	J	0.50	R	0.17	J	0.50	U	0.50	U
m,p-Xylene	0.40	J	0.50	R	0.42	J	0.50	U	0.50	U
Styrene	0.50	U	0.50	R	0.50	UJ	0.50	U	0.50	U
Bromoform	0.50	UJ	0.50	R	0.50	UJ	0.50	U	0.50	UJ
Isopropylbenzene	0.50	U	0.50	R	0.50	UJ	0.50	U	0.50	U
1,1,2,2-Tetrachloroethane	0.50	U	0.50	UJ	0.50	U	0.50	U	0.50	U
1,3-Dichlorobenzene	0.50	UJ	0.50	U	0.50	UJ	0.50	U	0.50	U
1,4-Dichlorobenzene	0.50	UJ	0.50	U	0.50	UJ	0.50	U	0.50	U
1,2-Dichlorobenzene	0.50	UJ	0.50	U	0.50	UJ	0.50	U	0.50	U
1,2-Dibromo-3-chloropropar	0.50	U	0.50	UJ	0.50	U	0.50	U	0.50	U
1,2,4-Trichlorobenzene	0.50	UJ	0.50	U	0.50	UJ	0.50	U	0.50	U
1,2,3-Trichlorobenzene	0.50	UJ	0.50	U	0.50	UJ	0.50	U	0.50	U

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Case #: 40646 SDG : E2RL9
Site : WEBB WELLFIELD

Lab.: SHEALY

Reviewer : Date :

Sample Number :	VBLKVL		VBLKVW		VHBLK01					
Sampling Location :										
Matrix :	Water		Water		Water					
Units :	ug/L		ug/L		ug/L					
Date Sampled :	ug/L		ug/L		ug/ L					
Time Sampled :										
%Moisture :	N/A		N/A		N/A					
pH:	14/7				14/7					
Dilution Factor :	1.0		1.0		1.0					
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	0.50	U	0.50	U	0.50	U				
Chloromethane	0.50	U	0.50	U	0.50	U				
Vinyl chloride	0.50	U	0.50	U	0.50	U				
Bromomethane	0.50	U	0.50	U	0.50	U				
Chloroethane	0.50	U	0.50	U	0.50	U				
Trichlorofluoromethane	0.50	U	0.50	U	0.50	U				
1,1-Dichloroethene	0.50	U	0.50	U	0.50	U				
1,1,2-Trichloro-1,2,2-trifluoro	0.50	U	0.50	U	0.50	U				
Acetone	5.0	U	5.0	U	2.8	J				
Carbon Disulfide	0.50	U	0.50	U	0.50	U				
Methyl acetate	0.50	U	0.50	U	0.50	U				
Methylene chloride	0.50	U	0.50	U	0.50	U				
trans-1,2-Dichloroethene	0.50	U	0.50	U	0.50	U				
Methyl tert-butyl ether	0.50	U	0.50	U	0.50	U				
1,1-Dichloroethane	0.50	U	0.50	U	0.50	U				
cis-1,2-Dichloroethene	0.50	U	0.50	U	0.50	U				
2-Butanone	5.0	U	5.0	U	5.0	U				
Bromochloromethane	0.50	U	0.50	U	0.50	U				
Chloroform	0.50	U	0.50	U	0.50	U				
1,1,1-Trichloroethane	0.50	U	0.50	U	0.50	U				
Cyclohexane	0.50	U	0.50	U	0.50	U				
Carbon tetrachloride	0.50	U	0.50	U	0.50	U				
Benzene	0.50	U	0.50	U	0.50	U				
1,2-Dichloroethane	0.50	U	0.50	U	0.50	U				
Trichloroethene	0.50	U	0.50	U	0.50	U				
Methylcyclohexane	0.50		0.50		0.50	U				
1,2-Dichloropropane	0.50	R	0.50	R	0.50	R				
Bromodichloromethane	0.50	U	0.50	U	0.50	U				
cis-1,3-Dichloropropene	0.50	U	0.50		0.20	J				
4-Methyl-2-pentanone	5.0	U	5.0	U	5.0	U				
Toluene Toluene	0.50	U	0.50	U	0.50	U				
trans-1,3-Dichloropropene	0.50	U	0.50	U	0.50	U				
1,1,2-Trichloroethane	0.50	U	0.50	U	0.50	U				
.,.,=	0.00		0.00		0.00					

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Case #: 40646 SDG : E2RL9 Site : WEBB WELLFIELD

Lab.: SHEALY

Sample Number :	VBLKVL		VBLKVW		VHBLK01					
Sampling Location :										
Matrix :	Water \		Water	Water		Water				
Units:	ug/L		ug/L		ug/L					
Date Sampled :										
Time Sampled :										
%Moisture:	N/A		N/A		N/A					
pH:										
Dilution Factor :	1.0		1.0		1.0					
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Tetrachloroethene	0.50	U	0.50	U	0.50	U				
2-Hexanone	5.0	U	5.0	U	5.0	U				
Dibromochloromethane	0.50	U	0.50	U	0.50	U				
1,2-Dibromoethane	0.50	U	0.50	U	0.50	U				
Chlorobenzene	0.50	U	0.50	U	0.50	U				
Ethylbenzene	0.50	U	0.50	U	0.50	U				·
o-Xylene	0.50	U	0.50	U	0.50	U				
m,p-Xylene	0.50	U	0.50	U	0.50	U				
Styrene	0.50	U	0.50	U	0.50	U				
Bromoform	0.50	U	0.50	U	0.50	U				
Isopropylbenzene	0.50	U	0.50	U	0.50	U				
1,1,2,2-Tetrachloroethane	0.50	U	0.50	U	0.50	U				
1,3-Dichlorobenzene	0.50	U	0.50	U	0.50	U				
1,4-Dichlorobenzene	0.50	U	0.50	U	0.50	U				
1,2-Dichlorobenzene	0.50	U	0.50	U	0.50	U				
1,2-Dibromo-3-chloropropar	0.50	U	0.50	U	0.50	U				
1,2,4-Trichlorobenzene	0.50	U	0.50		0.50	U				
1,2,3-Trichlorobenzene	0.50	U	0.50	U	0.50	U				

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION V SUPERFUND DIVISION

DATE:	
SUBJECT:	Review of Data Received for Review on: October 29, 2010
FROM:	Timothy Prendiville, Supervisor (SR-6J) Superfund Contract Management Section
TO:	Data User:IDEM Email address:mjaworsk@idem.in.gov
We have revie	wed the data for the following case:
Site Name: <u>V</u>	Vebb Well Field (IN)
Case Number:	40646 SDG Number: E2RN6
Number and T	Type of Samples: 13 waters (trace volatile)
Sample Numb	ers: <u>E2RM7, E2RN6, E2RP3, E2RP5, E2RP8, E2RP9, E2RQ0, E2RQ1, E2RQ3 – E2RQ7</u>
Laboratory: _S	Shealy Hrs for Review:
Following are	our findings:

CC: Howard Pham Region 5 TPO

Mail Code: SRT-5J

Page 2 of 7
Case Number: 40646
Site Name: Webb Well Field (IN)

Page 2 of 7
SDG Number: E2RN6
Laboratory: Shealy

Below is a summary of the out-of-control audits and the possible effects on the data for this case:

Thirteen (13) preserved water samples labeled E2RM7, E2RN6, E2RP3, E2RP5, E2RP8, E2RP9, E2RQ0, E2RQ1, E2RQ3 – E2RQ7 were collected from 10/05/2010 thru 10/07/2010. The samples were received intact by Shealy Environmental lab located in West Columbia, SC from 10/06/2010 thru 10/08/2010. Eleven (11) samples; E2RM7, E2RN6, E2RP8, E2RP9, E2RQ0, E2RQ1 and E2RQ3 – E2RQ7 were received at the proper shipping temperature range of 2 - 6°C. The cooler temperature for the remaining two (2) samples; E2RP3 and E2RP5 was 8°C upon receipt. Although the cooler containing these samples was outside the required temperature range, no sample results are qualified for exceeded temperature. All samples were analyzed for the trace volatile target compounds. All samples were analyzed according to CLP SOW SOM01.2 (10/2006) and reviewed according to the NFG for SOM01.2 and the SOP for ESAT 5/TechLaw Validation of Contract Laboratory Program Organic Data (Version 2.4).

Sample E2RN6 was designated by the samplers to be used for laboratory QC, i.e. MS / MSD analyses.

No samples were identified as field blanks or field duplicates.

Page 3 of 7 Case Number: 40646 SDG Number: E2RN6 Site Name: Webb Well Field (IN) Laboratory: Shealy

1. **HOLDING TIME**

The following samples have pH values greater than 2.0 and are considered as non-preserved water samples. These samples were analyzed within the 7-days technical holding time. Therefore, no qualification is required.

E2RP8, E2RP9, E2RQ0, E2RQ3

No pH values were included in the laboratory narrative for samples E2RP3 and E2RP5. Raw data indicated these samples have pH < 2. No qualification is required.

2. GC/MS TUNING AND GC INSTRUMENT PERFORMANCE

No problems were found.

3. **CALIBRATION**

No problems were found.

4. **BLANKS**

The following trace volatile samples have common contaminant analyte concentrations reported less than 2X the CRQL. The associated storage blank has common contaminant analyte concentration is less than 2X the concentration criteria. Detected compounds are qualified "U". Non-detected compounds are not qualified. Reported sample concentrations have been elevated to 2X the CRQL.

E2RP5, E2RQ0, E2RQ1, E2RQ7 Acetone

5. DEUTERATED MONITORING COMPOUND AND SURROGATE RECOVERY

The following volatile samples have DMC/SMC recoveries above the upper limit of the criteria window. Detected 1,1-Dichloroethene in sample E2RN6MSD is qualified "J". Non-detected compounds are not qualified for this criterion.

E2RN6MSD

1,1-Dichloroethene, trans-1,2-Dichloroethene, cis-1,2-Dichloroethene

E2RQ4

4-Methyl-2-pentanone, 2-Hexanone

The following trace volatile samples have one or more DMC/SMC recovery values is less than the primary lower limit but greater than or equal to the expanded lower limit of the criteria

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Case Number: 40646
Site Name: Webb Well Field (IN)

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SDG Number: E2RN6
Laboratory: Shealy

window. Detected Toluene in samples E2RP9 and E2RQ0 is qualified "J". Non-detected compounds are qualified "UJ".

E2RP5, E2RQ3

Chlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,2-Dichlorobenzene, 1,2,4-Trichlorobenzene, 1,2,3-Trichlorobenzene

E2RP9, E2RQ6

Trichloroethene, cis-1,3-Dichloropropene, Toluene, trans-1,3-Dichloropropene, 1,1,2-Trichloroethane, Tetrachloroethene, Ethylbenzene, o-Xylene, m,p-Xylene, Styrene, Isopropylbenzene

E2RO0

Cyclohexane, Trichloroethene, Methylcyclohexane, 1,2-Dichloropropane, Bromodichloromethane, cis-1,3-Dichloropropene, Toluene, trans-1,3-Dichloropropene, 1,1,2-Trichloroethane, Tetrachloroethene, Ethylbenzene, o-Xylene, m,p-Xylene, Styrene, Isopropylbenzene

E2RQ5

Trichloroethene, Toluene, Tetrachloroethene, Ethylbenzene, o-Xylene, m,p-Xylene, Styrene, Isopropylbenzene

6A. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Sample E2RN6 was designated by the samplers to be used for laboratory QC, i.e. MS / MSD analyses.

No problems were found.

6B. LABORATORY CONTROL SAMPLE

Not applicable to this analysis.

7. FIELD BLANK AND FIELD DUPLICATE

No samples were identified as field blanks or field duplicates.

8. INTERNAL STANDARDS

No problems were found.

9. COMPOUND IDENTIFICATION

After reviewing the mass spectra and chromatograms it appears that all volatile compounds were properly identified.

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Case Number: 40646
Site Name: Webb Well Field (IN)
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SDG Number: E2RN6
Laboratory: Shealy

10. COMPOUND QUANTITATION AND REPORTED DETECTION LIMITS

The following volatile samples have analyte concentrations below the quantitation limit (CRQL). Detected compounds are qualified "J".

E2RM7

Chloromethane, Methylene chloride

E2RN6MSD, E2RQ7

Chloromethane

E2RP3, E2RP9, E2RQ0 Chloromethane, Toluene

E2RP5

Chloromethane, Benzene, Toluene

E2RP8

Benzene, Toluene

E2RQ1

Methyl tert-butyl ether, Benzene, Toluene

E2RO3

Chloromethane, Cyclohexane, Benzene, Ethylbenzene, o-Xylene, m,p-Xylene

E2RQ4

Toluene

E2RO5

Benzene

VHBLK01

Acetone, cis-1,3-Dichloropropene

A library search indicates a match below 85% for a TIC compound in the trace volatile sample. Detected compounds are qualified "J".

Unknown @ 1.13 E2RN6

11. SYSTEM PERFORMANCE

GC/MS baseline indicated acceptable performance.

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Case Number: 40646
Site Name: Webb Well Field (IN)

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SDG Number: E2RN6
Laboratory: Shealy

12. ADDITIONAL INFORMATION

No pH values were included in the laboratory narrative for samples E2RP3 and E2RP5. Raw data indicated these samples have pH < 2.

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Case Number: 40646
Site Name: Webb Well Field (IN)

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SDG Number: E2RN6
Laboratory: Shealy

CADRE Data Qualifier Sheet

<u>Qualifiers</u>	<u>Data Qualifier Definitions</u>
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the action limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification.
NJ	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification and the associated numerical value represents its approximate concentration.
R	The data are unusable. (The compound may or may not be present.)

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Case #: 40646 SDG : E2RN6 Site : WEBB WELLFIELD

Site:WEBB WELLFIELDNumber of Soil Samples:0Lab.:SHEALYNumber of Water Samples:13Reviewer:Number of Sediment Samples:0

Date:

Sample Number :	E2RM7		E2RN6		E2RN6MS		E2RN6MS	D	E2RP3	
Sampling Location :	GW28		GW18		GW18		GW18		GW15	
Matrix :	Water		Water		Water		Water		Water	
Units :			ug/L		ug/L		ug/L		ug/L	
Date Sampled :	10/6/2010		10/5/2010		ug/ L		ug/ L		10/5/2010	
Time Sampled :	10/0/2010		10/0/2010						10/5/2010	
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH:	2		2		2		2		2	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloromethane	0.21	J	0.50	U	0.50	U	0.35	J	0.25	J
Vinyl chloride	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromomethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Trichlorofluoromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1-Dichloroethene	0.50	U	0.50	U	5.2		5.4	J	0.50	U
1,1,2-Trichloro-1,2,2-trifluor	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Acetone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Carbon Disulfide	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Methyl acetate	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Methylene chloride	0.24	J	0.50	U	0.50	U	0.50	U	0.50	U
trans-1,2-Dichloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Methyl tert-butyl ether	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1-Dichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
cis-1,2-Dichloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
2-Butanone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Bromochloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloroform	0.50	U	0.50	U	0.50	U	0.50	U	16	
1,1,1-Trichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Cyclohexane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Carbon tetrachloride	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Benzene	0.50	U	0.50	U	5.0		5.2		0.50	U
1,2-Dichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Trichloroethene	0.50	U	0.50	U	5.1		5.3		0.50	U
Methylcyclohexane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dichloropropane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromodichloromethane	0.50	U	0.50	U	0.50	U	0.50	U	7.0	
cis-1,3-Dichloropropene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
4-Methyl-2-pentanone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Toluene	0.50	U	0.50	U	5.0		5.2		0.33	J
trans-1,3-Dichloropropene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2-Trichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U

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Case #: 40646 SDG : E2RN6
Site : WEBB WELLFIELD

Lab.: SHEALY

Sample Number :	E2RM7		E2RN6		E2RN6MS		E2RN6MS	D	E2RP3	
Sampling Location :	GW28		GW18		GW18		GW18		GW15	
Matrix :	Water	Water		Water			Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	10/6/2010		10/5/2010						10/5/2010	
Time Sampled :										
%Moisture:	N/A		N/A		N/A		N/A		N/A	
pH:	2		2		2		2		2	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Tetrachloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
2-Hexanone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Dibromochloromethane	0.50	U	0.50	U	0.50	U	0.50	U	2.2	
1,2-Dibromoethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chlorobenzene	0.50	U	0.50	U	5.1		5.2		0.50	U
Ethylbenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
o-Xylene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
m,p-Xylene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Styrene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromoform	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Isopropylbenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2,2-Tetrachloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,3-Dichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,4-Dichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dibromo-3-chloropropar		U	0.50	U	0.50	U	0.50	U	0.50	U
1,2,4-Trichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2,3-Trichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U

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Case #: 40646 SDG : E2RN6
Site : WEBB WELLFIELD

Lab.: SHEALY

Reviewer : Date :

Sample Number :	E2RP5		E2RP8		E2RP9		E2RQ0		E2RQ1	
Sampling Location :	GW23		GW25		GW26		GW27		GW24	
Matrix :	Water									
Units :			ug/L		ug/L		ug/L		ug/L	
Date Sampled :	10/5/2010		10/6/2010		10/6/2010		10/6/2010		10/6/2010	
Time Sampled :	10/0/2010		10,0,2010		10/0/2010		10/0/2010		10/0/2010	
%Moisture :	N/A									
pH:	2		2		2		2		2	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Trace Volatile Compound	Result	Flag								
Dichlorodifluoromethane	0.50	U								
Chloromethane	0.30	J	0.50	U	0.24	J	0.24	J	0.50	U
Vinyl chloride	0.50	U								
Bromomethane	0.50	U								
Chloroethane	0.50	U								
Trichlorofluoromethane	0.50	U								
1,1-Dichloroethene	0.50	U								
1,1,2-Trichloro-1,2,2-trifluor	0.50	U								
Acetone	5.0	U								
Carbon Disulfide	0.50	U								
Methyl acetate	0.50	U								
Methylene chloride	0.50	U								
trans-1,2-Dichloroethene	0.50	U								
Methyl tert-butyl ether	0.50	U	0.50	U	0.50	U	0.50	U	0.41	J
1,1-Dichloroethane	0.50	U								
cis-1,2-Dichloroethene	0.50	U								
2-Butanone	5.0	U								
Bromochloromethane	0.50	U								
Chloroform	0.50	U								
1,1,1-Trichloroethane	0.50	U								
Cyclohexane	0.50	U	0.50	U	0.50	U	0.50	UJ	0.50	U
Carbon tetrachloride	0.50	U								
Benzene	0.14	J	0.20	J	0.50	U	0.50	U	0.19	J
1,2-Dichloroethane	0.50	U								
Trichloroethene	0.50	U	0.50	U	0.50	UJ	0.50	UJ	0.50	U
Methylcyclohexane	0.50	U	0.50	U	0.50	U	0.50	UJ	0.50	U
1,2-Dichloropropane	0.50	U	0.50	U	0.50	U	0.50	UJ	0.50	U
Bromodichloromethane	0.50	U	0.50	U	0.50	U	0.50	UJ	0.50	U
cis-1,3-Dichloropropene	0.50	U	0.50	U	0.50	UJ	0.50	UJ	0.50	U
4-Methyl-2-pentanone	5.0	U								
Toluene	0.32	J	0.36	J	0.19	J	0.19	J	0.36	J
trans-1,3-Dichloropropene	0.50	U	0.50	U	0.50	UJ	0.50	UJ	0.50	U
1,1,2-Trichloroethane	0.50	U	0.50	U	0.50	UJ	0.50	UJ	0.50	U

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Case #: 40646 SDG : E2RN6
Site : WEBB WELLFIELD

Lab.: SHEALY

Sample Number :	E2RP5		E2RP8	E2RP8		E2RP9			E2RQ1	
Sampling Location :	GW23		GW25	GW25		GW26		GW27		
Matrix:	Water	Water		Water			Water		Water	
Units:	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	10/5/2010		10/6/2010		10/6/2010		10/6/2010		10/6/2010	
Time Sampled :										
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH:	2		2		2		2		2	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Tetrachloroethene	0.50	U	0.50	U	0.50	UJ	0.50	UJ	0.50	U
2-Hexanone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Dibromochloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dibromoethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chlorobenzene	0.50	UJ	0.50	U	0.50	U	0.50	U	0.50	U
Ethylbenzene	0.50	U	0.50	U	0.50	UJ	0.50	UJ	0.50	U
o-Xylene	0.50	U	0.50	U	0.50	UJ	0.50	UJ	0.50	U
m,p-Xylene	0.50	U	0.50	U	0.50	UJ	0.50	UJ	0.50	U
Styrene	0.50	U	0.50	U	0.50	UJ	0.50	UJ	0.50	U
Bromoform	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Isopropylbenzene	0.50	U	0.50	U	0.50	UJ	0.50	UJ	0.50	U
1,1,2,2-Tetrachloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,3-Dichlorobenzene	0.50	UJ	0.50	U	0.50	U	0.50	U	0.50	U
1,4-Dichlorobenzene	0.50	UJ	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dichlorobenzene	0.50	UJ	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dibromo-3-chloropropar		U	0.50	U	0.50	U	0.50	U	0.50	U
1,2,4-Trichlorobenzene	0.50	UJ	0.50	U	0.50	U	0.50	U	0.50	U
1,2,3-Trichlorobenzene	0.50	UJ	0.50	U	0.50	U	0.50	U	0.50	U

Page ____ of ____

Case #: 40646 SDG : E2RN6
Site : WEBB WELLFIELD

Lab.: SHEALY

Reviewer : Date :

Sample Number :	E2RQ3		E2RQ4	E2RQ4		E2RQ5			E2RQ7	
Sampling Location :	GW29		GW30		GW31		GW32		GW33	
Matrix :	Water		Water		Water		Water		Water	
Units :			ug/L		ug/L		ug/L		ug/L	
Date Sampled :	10/7/2010		10/7/2010		10/7/2010		10/7/2010		10/7/2010	
Time Sampled :	10/1/2010		10,1,2010		10/1/2010		10/1/2010		10/1/2010	
%Moisture :	N/A		N/A		N/A		N/A		N/A	
pH:	2		2		2		2		2	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloromethane	0.45	J	0.50	U	0.50	U	0.50	U	0.27	J
Vinyl chloride	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromomethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Trichlorofluoromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1-Dichloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2-Trichloro-1,2,2-trifluor	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Acetone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Carbon Disulfide	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Methyl acetate	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Methylene chloride	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
trans-1,2-Dichloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Methyl tert-butyl ether	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1-Dichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
cis-1,2-Dichloroethene	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
2-Butanone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Bromochloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chloroform	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,1-Trichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Cyclohexane	0.46	J	0.50	U	0.50	U	0.50	U	0.50	U
Carbon tetrachloride	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Benzene	0.26	J	0.50	U	0.16	J	0.50	U	0.50	U
1,2-Dichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Trichloroethene	0.50	U	0.50	U	0.50	UJ	0.50	UJ	0.50	U
Methylcyclohexane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dichloropropane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromodichloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
cis-1,3-Dichloropropene	0.50	U	0.50	U	0.50	U	0.50	UJ	0.50	U
4-Methyl-2-pentanone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Toluene	0.72		0.18	J	0.50	UJ	0.50	UJ	0.50	U
trans-1,3-Dichloropropene	0.50	U	0.50	U	0.50	U	0.50	UJ	0.50	U
1,1,2-Trichloroethane	0.50	U	0.50	U	0.50	U	0.50	UJ	0.50	U

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Case #: 40646 SDG : E2RN6
Site : WEBB WELLFIELD

Lab.: SHEALY

Sample Number :	E2RQ3		E2RQ4		E2RQ5		E2RQ6		E2RQ7	
Sampling Location :	GW29	GW29		GW30		GW31		GW32		
Matrix :	Water	Water		Water		Water		Water		
Units:	ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :	10/7/2010		10/7/2010		10/7/2010		10/7/2010		10/7/2010	
Time Sampled :										
%Moisture:	N/A		N/A		N/A		N/A		N/A	
pH:	2		2		2		2		2	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Tetrachloroethene	0.50	U	0.50	U	0.50	UJ	0.50	UJ	0.50	U
2-Hexanone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Dibromochloromethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dibromoethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chlorobenzene	0.50	UJ	0.50	U	0.50	U	0.50	U	0.50	U
Ethylbenzene	0.16	J	0.50	U	0.50	UJ	0.50	UJ	0.50	U
o-Xylene	0.14	J	0.50	U	0.50	UJ	0.50	UJ	0.50	U
m,p-Xylene	0.32	J	0.50	U	0.50	UJ	0.50	UJ	0.50	U
Styrene	0.50	U	0.50	U	0.50	UJ	0.50	UJ	0.50	U
Bromoform	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Isopropylbenzene	0.50	U	0.50	U	0.50	UJ	0.50	UJ	0.50	U
1,1,2,2-Tetrachloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,3-Dichlorobenzene	0.50	UJ	0.50	U	0.50	U	0.50	U	0.50	U
1,4-Dichlorobenzene	0.50	UJ	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dichlorobenzene	0.50	UJ	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dibromo-3-chloropropar	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,2,4-Trichlorobenzene	0.50	UJ	0.50	U	0.50	U	0.50	U	0.50	U
1,2,3-Trichlorobenzene	0.50	UJ	0.50	U	0.50	U	0.50	U	0.50	U

Analytical Results	(Qualified Data)
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Case #: 40646 SDG : E2RN6
Site : WEBB WELLFIELD

Lab.: SHEALY

Reviewer : Date :

1	VBLKVL		VBLKVT		VBLKVW		VHBLK01			
Sampling Location :										
Matrix :	Water		Water		Water		Water			
Units:	ug/L		ug/L		ug/L		ug/L			
Date Sampled :										
Time Sampled :										
%Moisture :	N/A		N/A		N/A		N/A			
pH:										
Dilution Factor :	1.0		1.0		1.0		1.0			
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	0.50	U	0.50	U	0.50	U	0.50	U		
Chloromethane	0.50	U	0.50	U	0.50	U	0.50	U		
Vinyl chloride	0.50	U	0.50	U	0.50	U	0.50	U		
Bromomethane	0.50	U	0.50	U	0.50	U	0.50	U		
Chloroethane	0.50	U	0.50	U	0.50	U	0.50	U		
Trichlorofluoromethane	0.50	U	0.50	U	0.50	U	0.50	U		
1,1-Dichloroethene	0.50	U	0.50	U	0.50	U	0.50	U		
1,1,2-Trichloro-1,2,2-trifluor	0.50	U	0.50	U	0.50	U	0.50	U		
Acetone	5.0	U	5.0	U	5.0	U	2.8	J		
Carbon Disulfide	0.50	U	0.50	U	0.50	U	0.50	U		
Methyl acetate	0.50	U	0.50	U	0.50	U	0.50	U		
Methylene chloride	0.50	U	0.50	U	0.50	U	0.50	U		
trans-1,2-Dichloroethene	0.50	U	0.50	U	0.50	U	0.50	U		
Methyl tert-butyl ether	0.50	U	0.50	U	0.50	U	0.50	U		
1,1-Dichloroethane	0.50	U	0.50	U	0.50	U	0.50	U		
cis-1,2-Dichloroethene	0.50	U	0.50	U	0.50	U	0.50	U		
2-Butanone	5.0	U	5.0	U	5.0	U	5.0	U		
Bromochloromethane	0.50	U	0.50	U	0.50	U	0.50	U		
Chloroform	0.50	U	0.50	U	0.50	U	0.50	U		
1,1,1-Trichloroethane	0.50	U	0.50	U	0.50	U	0.50	U		
Cyclohexane	0.50	U	0.50	U	0.50	U	0.50	U		
Carbon tetrachloride	0.50	U	0.50	U	0.50	U	0.50	U		
Benzene	0.50	U	0.50	U	0.50	U	0.50	U		
1,2-Dichloroethane	0.50	U	0.50	U	0.50	U	0.50	U		
Trichloroethene	0.50	U	0.50	U	0.50	U	0.50	U		
Methylcyclohexane	0.50	U	0.50	U	0.50	U	0.50	U		
1,2-Dichloropropane	0.50	U	0.50	U	0.50	U	0.50	U		
Bromodichloromethane	0.50	U	0.50	U	0.50	U	0.50	U		
cis-1,3-Dichloropropene	0.50	U	0.50	U	0.50	U	0.20	J		
4-Methyl-2-pentanone	5.0	U	5.0	U	5.0	U	5.0	U		
Toluene	0.50	U	0.50	U	0.50	U	0.50	U		
trans-1,3-Dichloropropene	0.50	U	0.50	U	0.50	U	0.50	U		
1,1,2-Trichloroethane	0.50	U	0.50	U	0.50	U	0.50	U		

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Case #: 40646 SDG : E2RN6
Site : WEBB WELLFIELD

Lab.: SHEALY

Sample Number :	VBLKVL		VBLKVT		VBLKVW		VHBLK01			
Sampling Location :										
Matrix :	Water		Water		Water		Water			
Units:	ug/L		ug/L		ug/L		ug/L			
Date Sampled :										
Time Sampled :										
%Moisture :	N/A		N/A		N/A		N/A			
pH:										
Dilution Factor :	1.0		1.0		1.0		1.0			
Trace Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Tetrachloroethene	0.50	U	0.50	U	0.50	U	0.50	U		
2-Hexanone	5.0	U	5.0	U	5.0	U	5.0	U		
Dibromochloromethane	0.50	U	0.50	U	0.50	U	0.50	U		
1,2-Dibromoethane	0.50	U	0.50	U	0.50	U	0.50	U		
Chlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U		
Ethylbenzene	0.50	U	0.50	U	0.50	U	0.50	U		
o-Xylene	0.50	U	0.50	U	0.50	U	0.50	U		
m,p-Xylene	0.50	U	0.50	U	0.50	U	0.50	U		
Styrene	0.50	U	0.50	U	0.50	U	0.50	U		
Bromoform	0.50	U	0.50	U	0.50	U	0.50	U		
Isopropylbenzene	0.50	U	0.50	U	0.50	U	0.50	U		
1,1,2,2-Tetrachloroethane	0.50	U	0.50	U	0.50	U	0.50	U		
1,3-Dichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U		
1,4-Dichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U		
1,2-Dichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U		
1,2-Dibromo-3-chloropropar	0.50	U	0.50	U	0.50	U	0.50	U		
1,2,4-Trichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U		
1,2,3-Trichlorobenzene	0.50	U	0.50	U	0.50	U	0.50	U		

10:19 Thu, Oct 28, 2010

National Functional Guidelines Report # 9

SOW SOMOL.2		
DDITID 103330		Level=Trace
Region 5	spunodi	Matrix=Water
ontract EPW05031	ly identified Com	Location=GW18
Case 40646 Con	Tentative	Sample=E2RN6
SDG EZKN6		VOA Trace
Lab SHEALY (Shealy Environmental)		

CAS No.	Compound Nan	e RT C (mins)	Concentration		Lab Qualifier
	Unknown-01	1.13	1.13 170	ng/L	J

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION V SUPERFUND DIVISION

DATE:		
SUBJECT:	Review of Data Received for Review on: October 29, 2010	
FROM:	Timothy Prendiville, Supervisor (SR-6J) Superfund Contract Management Section	
TO:	Data User: <u>IDEM</u> Email: <u>mjaworsk@idem.in.gov</u>	
We have revie	wed the data for the following case:	
SITE Name:	Webb Well Field (IN)	
Case Number:	<u>40646</u>	SDG Number: <u>E2RN9</u>
Number and T	Type of Samples: 5 soil Samples (Low/med V	<u>/olatiles)</u>
Sample Numb	ers: <u>E2RN9, E2RP4, E2RP6, E2RP7, E2RQ2</u>	
Laboratory:	Shealy Environmental	Hrs for Review:
Following are	our findings:	

CC: Howard Pham Region 5 TPO Mail Code: SRT-5J

Page 2 of 8 SDG Number: E2RN9

Site Name: Webb Well Field (IN)

Laboratory: Shealy Environmental

Below is a summary of the out-of-control audits and the possible effects on the data for this case:

Five (5) soil samples labeled E2RN9, E2RP4, E2RP6, E2RP7 and E2RQ2, were shipped to Shealy Environmental located in West Columbia, SC. All samples were collected October 5-6, 2010 and received at the laboratory October 6-7, 2010 intact. One sample, E2RP4, arrived with a cooler temperature of 8°C which is outside the optimum temperature range of 2-6°C. Sample results are not qualified for this deviation.

All samples were analyzed according to CLP SOW SOM01.2 (10/2006) and reviewed according to the NFG for SOM01.2 and the SOP for ESAT 5/TechLaw Validation of Contract Laboratory Program Organic Data (Version 2.4).

Sample E2RQ2 was designated by the samplers to be used for laboratory QC, i.e. MS/MSD analyses.

No samples were identified as field blanks or field duplicates.

Case Number: 40646

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Case Number: 40646 SDG Number: E2RN9

Site Name: Webb Well Field (IN)

Laboratory: Shealy Environmental

1. HOLDING TIME

No problems were found.

2. GC/MS TUNING AND GC INSTRUMENT PERFORMANCE

No problems were found.

3. CALIBRATION

The following volatile samples are associated with an initial calibration and CCVs with relative response factors (RRFs) outside criteria. Detected compounds are qualified "J". Non-detected compounds are qualified "R".

E2RN9, E2RN9RE, E2RP4, E2RP6, E2RP7, E2RP7RE, E2RQ2, E2RQ2MS, E2RQ2MSD, E2QR2RE, VBLKVF, VBLKVJ, VBLKVN, VBLKVX, VBLKWD, VHBLK01
1,4-Dioxane

The following volatile samples are associated with an initial calibration and CCVs in which a DMC did not meet relative response factor (RRF) criteria. Detected and non-detected compounds are not qualified.

E2RN9, E2RN9RE, E2RP4, E2RP6, E2RP7, E2RP7RE, E2RQ2, E2RQ2MS, E2RQ2MSD, E2QR2RE, VBLKVF, VBLKVJ, VBLKVN, VBLKVX, VBLKWD, VHBLK01
1,4-Dioxane-d8

The following volatile samples are associated with an opening CCV percent difference (%D) outside criteria. Detected compounds are qualified "J". Non-detected compounds are qualified "UJ". Non-detected compounds in sample E2RN9RE are ultimately qualified "R" due to poor internal standard responses.

Vinyl chloride, 1,1-Dichloroethene E2RP6, E2RP7, E2RQ2, E2RQ2MS, E2RQ2MSD, VBLKVN

1,2,4-Trichlorobenzene E2RN9RE, E2RP4, VBLKVJ

4. BLANKS

No problems were found.

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Case Number: 40646 SDG Number: E2RN9

Site Name: Webb Well Field (IN)

Laboratory: Shealy Environmental

5. DEUTERATED MONITORING COMPOUND AND SURROGATE RECOVERY

The following volatile samples have DMC/SMC recoveries above the upper limit of the criteria window. None of these compounds were detected in the samples. Non-detected compounds are not qualified. Non-detected compounds in sample E2RP7 are ultimately qualified "UJ" because all calibration criteria were not met. Non-detected compounds in samples E2RN9, E2RN9RE and E2PR7RE are ultimately qualified "R" due to poor internal standard responses.

E2RN9

Dichlorodifluoromethane, Chloromethane, Vinyl chloride, Bromomethane, Chloroethane, Trichlorofluoromethane, 1,1,2-Trichloro-1,2,2-trifluoroethane, Carbon Disulfide, Methyl acetate, Methylene chloride, Methyl tert-butyl ether, 1,1-Dichloroethane, Bromochloromethane, Chloroform, 1,1,1-Trichloroethane, Cyclohexane, Carbon tetrachloride, Benzene, 1,2-Dichloroethane, Trichloroethene, Methylcyclohexane, 1,2-Dichloropropane, Bromodichloromethane, Toluene, Tetrachloroethene, Dibromochloromethane, 1,2-Dibromoethane, Ethylbenzene, o-Xylene, m,p-Xylene, Styrene, Bromoform, Isopropylbenzene

E2RN9RE

Dichlorofluoromethane, Chloromethane, Vinyl chloride, Bromomethane, Chloroethane, Trichlorofluoromethane, 1,1,2-Trichloro-1,2,2-trifluoroethane, Carbon Disulfide, Methyl acetate, Methylene chloride, Methyl tert-butyl ether, 1,1,1-Trichloroethane, Carbon tetrachloride, 1,2-Dichloroethane, 1,2-Dibromoethane

E2RP7, E2RQ2 Vinyl chloride

E2RP7RE

Dichlorofluoromethane, Chloromethane, Vinyl chloride, Bromomethane, Chloroethane, Carbon Disulfide

The following volatile samples have one or more DMC/SMS recovery values less than the primary lower limit but greater than or equal to the expanded lower limit (20%) of the criteria window. Detected compounds are qualified "J". Non-detected compounds are qualified "UJ". Some non-detected compounds in sample E2RQ2RE are ultimately qualified "R" due to poor internal standard responses.

E2RP6, E2RQ2MS

Chlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,2-Dichlorobenzene, 1,2,4-Trichlorobenzene, 1,2,3-Trichlorobenzene

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Case Number: 40646 SDG Number: E2RN9

Site Name: Webb Well Field (IN)

Laboratory: Shealy Environmental

E2RQ2RE

Trichlorofluoromethane, 1,1,2-Trichloro-1,2,2-trifluoroethane, Methyl acetate, Methylene chloride, Methyl tert-butyl ether, 1,1-Dichloroethane, Bromochloromethane, Chloroform, 1,1,1-Trichloroethane, Carbon tetrachloride, 1,2-Dichloroethane, Trichloroethene, cis-1,3-Dichloropropene, Toluene, trans-1,3-Dichloropropene, 1,1,2-Trichloroethane, Tetrachloroethene, Dibromochloromethane, 1,2-Dibromoethane, Ethylbenzene, o-Xylene, m,p-Xylene, Styrene, Bromoform, Isopropylbenzene, 1,1,2,2-Tetrachloroethane, 1,2-Dibromo-3-chloropropane

The following volatile samples have DMC/SMC recoveries below the expanded lower limit of the criteria window. No compounds were detected in the sample. Non-detected compounds are qualified "R".

E2RN9

1,4-Dioxane, 4-Methyl-2-pentanone, 2-Hexanone

6A. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Sample E2RQ2 was designated by the samplers to be used for laboratory QC, i.e. matrix spike / matrix spike duplicate analyses.

The relative percent difference (RPD) between the following volatile matrix spike and matrix spike duplicate recoveries is outside criteria. No compounds were detected in the unspiked sample, E2RQ2. Non-detected compounds in the unspiked sample, E2RQ2, are qualified "UJ".

E2RQ2MS, E2RQ2MSD Benzene, Trichloroethene, Toluene, Chlorobenzene

6B. LABORATORY CONTROL SAMPLE

Not applicable to this analysis.

7. FIELD BLANK AND FIELD DUPLICATE

No samples were identified as field blanks or field duplicates. Results are not qualified based upon the results of the field duplicates.

8. INTERNAL STANDARDS

The following volatile samples have internal standard are counts that are outside the lower limit of primary criteria. Detected compounds are qualified "J". Non-detected compounds are qualified "R".

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Case Number: 40646 SDG Number: E2RN9

Site Name: Webb Well Field (IN)

Laboratory: Shealy Environmental

E2RN9. E2RN9RE. E2RP7RE

Dichlorodifluoromethane, Chloromethane, Vinyl chloride, Bromomethane, Chloroethane, Trichlorofluoromethane, 1,1-Dichloroethene, 1,1,2-Trichloro-1,2,2-trifluoroethane, Acetone, Carbon disulfide, Methyl acetate, Methylene chloride, trans-1,2-Dichloroethene, Methyl tert-butyl ether, 1,1-Dichloroethane, cis-1,2-Dichloroethene, 2-Butanone, Bromochloromethane, Chloroform, 1,1,1-Trichloroethane, Cyclohexane, Carbon tetrachloride, Benzene, 1,2-Dichloroethane, 1,4-Dioxane, Trichloroethene, Methylcyclohexane, 1,2-Dichloropropane, Bromodichloromethane, cis-1,3-Dichloropropene, 4-Methyl-2-pentanone, Toluene, trans-1,3-Dichloropropene, 1,1,2-Trichloroethane, Tetrachloroethene, 2-Hexanone, Dibromochloromethane, 1,2-Dibromoethane, Chlorobenzene, Ethylbenzene, o-Xylene, m,p-Xylene, Styrene, Bromoform, Isopropylbenzene, 1,1,2,2-Tetrachloroethane, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,2-Dichlorobenzene, 1,2-Dibromo-3-chloropropane,

E2RP7, E2RQ2, E2RQ2RE

1,2,4-Trichlorobenzene, 1,2,3-Trichlorobenzene

Bromoform, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,2-Dichlorobenzene, 1,2-Dibromo-3-chloropropane, 1,2,4-Trichlorobenzene, 1,2,3-Trichlorobenzene

9. COMPOUND IDENTIFICATION

After reviewing the mass spectra and chromatograms it appears that all VOA compounds were properly identified.

10. COMPOUND QUANTITATION AND REPORTED DETECTION LIMITS

The following volatile samples have analyte concentrations below the quantitation limit (CRQL). Detected compounds are qualified "J".

E2RP4, E2RQ2MS, E2RQ2MSD Tetrachloroethene

A library search inidicates a match below 85% for a TIC compound in the following volatile samples. Detected compounds are qualified "J".

Unknown @ 7.890 E2RP6, E2RP7, E2RQ2, E2RQ2RE

11. SYSTEM PERFORMANCE

GC/MS baseline indicated acceptable performance.

Page 7 of 8 SDG Number: E2RN9

Case Number: 40646 SDG Number: E2RN9
Site Name: Webb Well Field (IN) Laboratory: Shealy Environmental

12. ADDITIONAL INFORMATION

The following volatile samples have compound concentrations which exceed the instruments calibration range. The detected results are qualified "J". No dilution was analyzed due to insufficient sample volume.

E2RN9RE

Tetrachloroethene

The Form 8A – for EPA Sample VST050VI (analyzed 10/08/2010 @ 0755) was missing from the hardcopy data package. The form was manually generated by the Reviewer.

Page 8 of 8 SDG Number: E2RN9

Laboratory: Shealy Environmental

CADRE Data Qualifier Sheet

Site Name: Webb Well Field (IN)

Case Number: 40646

Qualifiers	<u>Data Qualifier Definitions</u>
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the action limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification.
NJ	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification and the associated numerical value represents its approximate concentration.
R	The data are unusable. (The compound may or may not be present.)

Page ____ of ____

Number of Soil Samples: 5

Case #: 40646 SDG : E2RN9
Site : WEBB WELLFIELD

Lab.: SHEALY Number of Water Samples: 0 Reviewer: Number of Sediment Samples: 0

Date:

Sample Number :	E2RN9		E2RN9RE		E2RP4		E2RP6		E2RP7	
Sampling Location :		SB1		SB1 SB2			SB3		SB4	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	10/5/2010		ug/11g		10/5/2010		ug/Kg 10/6/2010		10/6/2010	
Time Sampled :	10/0/2010				10/0/2010		10/0/2010		10/0/2010	
%Moisture :	16		16		9		4		6	
pH:	10		10		J		7			
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	5.0	R	5.0	R	4.1	U	4.9	U	4.9	U
Chloromethane	5.0	R	5.0	R	4.1	U	4.9	U	4.9	U
Vinyl chloride	5.0	R	5.0	R	4.1	U	4.9	UJ	4.9	UJ
Bromomethane	5.0	R	5.0	R	4.1	U	4.9	U	4.9	U
Chloroethane	5.0	R	5.0	R	4.1	U	4.9	U	4.9	U
Trichlorofluoromethane	5.0	R	5.0	R	4.1	U	4.9	U	4.9	U
1,1-Dichloroethene	5.0	R	5.0	R	4.1	U	4.9	UJ	4.9	UJ
1,1,2-Trichloro-1,2,2-trifluor	5.0	R	5.0	R	4.1	U	4.9	U	4.9	U
Acetone	10	R	10	R	8.2	U	9.9	U	9.9	U
Carbon Disulfide	5.0	R	5.0	R	4.1	U	4.9	U	4.9	U
Methyl acetate	5.0	R	5.0	R	4.1	U	4.9	U	4.9	U
Methylene chloride	5.0	R	5.0	R	4.1	U	4.9	U	4.9	U
trans-1,2-Dichloroethene	5.0	R	5.0	R	4.1	U	4.9	U	4.9	U
Methyl tert-butyl ether	5.0	R	5.0	R	4.1	U	4.9	U	4.9	U
1,1-Dichloroethane	5.0	R	5.0	R	4.1	U	4.9	U	4.9	U
cis-1,2-Dichloroethene	5.0	R	5.0	R	4.1	U	4.9	U	4.9	U
2-Butanone	10	R	10	R	8.2	U	9.9	U	9.9	U
Bromochloromethane	5.0	R	5.0	R	4.1	U	4.9	U	4.9	U
Chloroform	5.0	R	5.0	R	4.1	U	4.9	U	4.9	U
1,1,1-Trichloroethane	5.0	R	5.0	R	4.1	U	4.9	U	4.9	U
Cyclohexane	5.0	R	5.0	R	4.1	U	4.9	U	4.9	U
Carbon tetrachloride	5.0	R	5.0	R	4.1	U	4.9	U	4.9	U
Benzene	5.0	R	5.0	R	4.1	U	4.9	U	4.9	U
1,2-Dichloroethane	5.0	R	5.0	R	4.1	U	4.9	U	4.9	U
1,4-Dioxane	100	R	100	R	82	R	99	R	99	R
Trichloroethene	5.0	R	5.0	R	4.1	U	4.9	U	4.9	U
Methylcyclohexane	5.0	R	5.0	R	4.1	U	4.9	U	4.9	U
1,2-Dichloropropane	5.0	R	5.0	R	4.1	U	4.9	U	4.9	U
Bromodichloromethane	5.0	R	5.0	R	4.1	U	4.9	U	4.9	U
cis-1,3-Dichloropropene	5.0	R	5.0	R	4.1	U	4.9	U	4.9	U
4-Methyl-2-pentanone	10	R	10	R	8.2	U	9.9	U	9.9	U
Toluene	5.0	R	5.0	R	4.1	U	4.9	U	4.9	U
trans-1,3-Dichloropropene	5.0	R	5.0	R	4.1	U	4.9	U	4.9	U

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Case #: 40646 SDG : E2RN9
Site : WEBB WELLFIELD

Lab.: SHEALY

Reviewer : Date :

Sample Number :	E2RN9		E2RN9RE		E2RP4		E2RP6		E2RP7	
Sampling Location :	SB1		SB1		SB2		SB3		SB4	
Matrix:	Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	10/5/2010				10/5/2010		10/6/2010		10/6/2010	
Time Sampled :										
%Moisture :	16		16		9		4		6	
pH :										
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
1,1,2-Trichloroethane	5.0	R	5.0	R	4.1	U	4.9	U	4.9	U
Tetrachloroethene	5.0	R	220	J	2.4	J	4.9	U	4.9	U
2-Hexanone	10	R	10	R	8.2	U	9.9	U	9.9	U
Dibromochloromethane	5.0	R	5.0	R	4.1	U	4.9	U	4.9	U
1,2-Dibromoethane	5.0	R	5.0	R	4.1	U	4.9	U	4.9	U
Chlorobenzene	5.0	R	5.0	R	4.1	U	4.9	UJ	4.9	U
Ethylbenzene	5.0	R	5.0	R	4.1	U	4.9	U	4.9	U
o-Xylene	5.0	R	5.0	R	4.1	U	4.9	U	4.9	U
m,p-Xylene	5.0	R	5.0	R	4.1	U	4.9	U	4.9	U
Styrene	5.0	R	5.0	R	4.1	U	4.9	U	4.9	U
Bromoform	5.0	R	5.0	R	4.1	U	4.9	U	4.9	R
Isopropylbenzene	5.0	R	5.0	R	4.1	U	4.9	U	4.9	U
1,1,2,2-Tetrachloroethane	5.0	R	5.0	R	4.1	U	4.9	U	4.9	U
1,3-Dichlorobenzene	5.0	R	5.0	R	4.1	U	4.9	UJ	4.9	R
1,4-Dichlorobenzene	5.0	R	5.0	R	4.1	U	4.9	UJ	4.9	R
1,2-Dichlorobenzene	5.0	R	5.0	R	4.1	U	4.9	UJ	4.9	R
1,2-Dibromo-3-chloropropar	5.0	R	5.0	R	4.1	U	4.9	U	4.9	R
1,2,4-Trichlorobenzene	5.0	R	5.0	R	4.1	UJ	4.9	UJ	4.9	R
1,2,3-Trichlorobenzene	5.0	R	5.0	R	4.1	U	4.9	UJ	4.9	R

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Case #: 40646 SDG : E2RN9
Site : WEBB WELLFIELD

Lab.: SHEALY

Reviewer : Date :

Sample Number :	E2RP7RE		E2RQ2		E2RQ2MS		E2RQ2MS	D	E2RQ2RE	
Sampling Location :	SB4	SB4		SB5 SB5		SB5		SB5		
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units :	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :	-3/1-3		10/6/2010		3.1-3		-9/1-9		-3/1-3	
Time Sampled :			10,0,2010							
%Moisture :	6		10		10		10		10	
pH:			10		10		10		10	
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	5.0	R	4.1	U	4.1	U	4.1	U	4.3	U
Chloromethane	5.0	R	4.1	U	4.1	U	4.1	U	4.3	U
Vinyl chloride	5.0	R	4.1	UJ	4.1	UJ	4.1	UJ	4.3	U
Bromomethane	5.0	R	4.1	U	4.1	U	4.1	U	4.3	U
Chloroethane	5.0	R	4.1	U	4.1	U	4.1	U	4.3	U
Trichlorofluoromethane	5.0	R	4.1	U	4.1	U	4.1	U	4.3	UJ
1,1-Dichloroethene	5.0	R	4.1	UJ	40	J	48	J	4.3	U
1,1,2-Trichloro-1,2,2-trifluor		R	4.1	U	4.1	U	4.1	U	4.3	UJ
Acetone	9.9	R	8.2	U	8.2	U	8.3	U	8.5	U
Carbon Disulfide	5.0	R	4.1	U	4.1	U	4.1	U	4.3	U
Methyl acetate	5.0	R	4.1	U	4.1	U	4.1	U	4.3	UJ
Methylene chloride	5.0	R	4.1	U	4.1	U	4.1	U	4.3	UJ
trans-1,2-Dichloroethene	5.0	R	4.1	U	4.1	U	4.1	U	4.3	U
Methyl tert-butyl ether	5.0	R	4.1	U	4.1	U	4.1	U	4.3	UJ
1,1-Dichloroethane	5.0	R	4.1	U	4.1	U	4.1	U	4.3	UJ
cis-1,2-Dichloroethene	5.0	R	4.1	U	4.1	U	4.1	U	4.3	U
2-Butanone	9.9	R	8.2	U	8.2	U	8.3	U	8.5	U
Bromochloromethane	5.0	R	4.1	U	4.1	U	4.1	U	4.3	UJ
Chloroform	5.0	R	4.1	U	4.1	U	4.1	U	4.3	UJ
	5.0	R		U	4.1	U	4.1	U	4.3	UJ
1,1,1-Trichloroethane Cyclohexane	5.0	R	4.1 4.1	U	4.1	U	4.1	U		U
•				U		U		U	4.3	_
Carbon tetrachloride	5.0	R R	4.1	U	4.1		4.1 51		4.3	UJ
Benzene 4 0 Diablementh and	5.0		4.1		40	J		J	4.3	
1,2-Dichloroethane	5.0	R	4.1	U	4.1	U	4.1	U	4.3	UJ
1,4-Dioxane	99	R	82	R	82	R	83	R	85	R
Trichloroethene	5.0	R	4.1	U	37	J	48	J	4.3	UJ
Methylcyclohexane	5.0	R	4.1	U	4.1	U	4.1	U	4.3	U
1,2-Dichloropropane	5.0	R	4.1	U	4.1	U	4.1	U	4.3	U
Bromodichloromethane	5.0	R	4.1	U	4.1	U	4.1	U	4.3	U
cis-1,3-Dichloropropene	5.0	R	4.1	U	4.1	U	4.1	U	4.3	UJ
4-Methyl-2-pentanone	9.9	R	8.2	U	8.2	U	8.3	U	8.5	U
Toluene	5.0	R	4.1	U	36	J	47	J	4.3	UJ
trans-1,3-Dichloropropene	5.0	R	4.1	U	4.1	U	4.1	U	4.3	UJ

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Case #: 40646 SDG : E2RN9
Site : WEBB WELLFIELD

Lab.: SHEALY

Reviewer : Date :

Sample Number :	E2RP7RE		E2RQ2		E2RQ2MS		E2RQ2MS	D	E2RQ2RE	
Sampling Location :	SB4		SB5		SB5		SB5		SB5	
Matrix :	Soil		Soil		Soil		Soil		Soil	
Units:			ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :			10/6/2010							
Time Sampled :										
%Moisture:	6		10		10		10		10	
pH:										
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
1,1,2-Trichloroethane	5.0	R	4.1	U	4.1	U	4.1	U	4.3	UJ
Tetrachloroethene	5.0	R	4.1	U	1.4	J	1.2	J	4.3	UJ
2-Hexanone	9.9	R	8.2	U	8.2	U	8.3	U	8.5	U
Dibromochloromethane	5.0	R	4.1	U	4.1	U	4.1	U	4.3	UJ
1,2-Dibromoethane	5.0	R	4.1	U	4.1	U	4.1	U	4.3	UJ
Chlorobenzene	5.0	R	4.1	U	30	J	38	J	4.3	U
Ethylbenzene	5.0	R	4.1	U	4.1	U	4.1	U	4.3	UJ
o-Xylene	5.0	R	4.1	U	4.1	U	4.1	U	4.3	UJ
m,p-Xylene	5.0	R	4.1	U	4.1	U	4.1	U	4.3	UJ
Styrene	5.0	R	4.1	U	4.1	U	4.1	U	4.3	UJ
Bromoform	5.0	R	4.1	R	4.1	U	4.1	U	4.3	R
Isopropylbenzene	5.0	R	4.1	U	4.1	U	4.1	U	4.3	UJ
1,1,2,2-Tetrachloroethane	5.0	R	4.1	U	4.1	U	4.1	U	4.3	UJ
1,3-Dichlorobenzene	5.0	R	4.1	R	4.1	UJ	4.1	U	4.3	R
1,4-Dichlorobenzene	5.0	R	4.1	R	4.1	UJ	4.1	U	4.3	R
1,2-Dichlorobenzene	5.0	R	4.1	R	4.1	UJ	4.1	U	4.3	R
1,2-Dibromo-3-chloropropar	5.0	R	4.1	R	4.1	U	4.1	U	4.3	R
1,2,4-Trichlorobenzene	5.0	R	4.1	R	4.1	UJ	4.1	U	4.3	R
1,2,3-Trichlorobenzene	5.0	R	4.1	R	4.1	UJ	4.1	U	4.3	R

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Case #: 40646 SDG : E2RN9
Site : WEBB WELLFIELD

Lab.: SHEALY

Reviewer : Date :

Dichlorodifluoromethane	Sample Number :	VBLKVF		VBLKVJ		VBLKVN		VBLKVX		VBLKWD	
Matrix : Soil Ug/Kg ug/Kg <td>Sampling Location :</td> <td></td>	Sampling Location :										
Date Sampled:	Matrix:	Soil									
Date Sampled :	Units:	ug/Kg									
%Moisture : pH : Dilution Factor : 1.0 <	Date Sampled :							0 0		0 0	
%Moisture : pH : Dilution Factor : 1.0 <	Time Sampled :										
Dilution Factor : 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 Volatile Compound Result Flag Fl	· ·	0		0		0		0		0	
Volatile Compound	pH:										
Dichlorodifluoromethane 5.0 U 5.	Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Chloromethane 5.0 U 5.0	Volatile Compound	Result	Flag								
Ninyl chloride	Dichlorodifluoromethane	5.0	U								
Bromomethane	Chloromethane	5.0	U								
Chloroethane 5.0 U	Vinyl chloride	5.0	U	5.0	U	5.0	UJ	5.0	U	5.0	U
Trichlorofluoromethane 5.0 U 5.0 U<	Bromomethane	5.0	U								
1,1-Dichloroethene 5.0 U	Chloroethane	5.0	U								
1,1,2-Trichloro-1,2,2-trifluor 5.0 U 5.0	Trichlorofluoromethane	5.0	U								
Acetone 10 U 5.0	1,1-Dichloroethene	5.0	U	5.0	U	5.0	UJ	5.0	U	5.0	U
Acetone 10 U 5.0	1,1,2-Trichloro-1,2,2-trifluoro	5.0	U								
Methyl acetate 5.0 U	Acetone	10	U								
Methylene chloride 5.0 U	Carbon Disulfide	5.0	U								
trans-1,2-Dichloroethene 5.0 U 5.0	Methyl acetate	5.0	U								
Methyl tert-butyl ether 5.0 U	Methylene chloride	5.0	U								
1,1-Dichloroethane 5.0 U	trans-1,2-Dichloroethene	5.0	U								
cis-1,2-Dichloroethene 5.0 U 5.0 U<	Methyl tert-butyl ether	5.0	U								
2-Butanone 10 U 10 <td>1,1-Dichloroethane</td> <td>5.0</td> <td>U</td> <td>5.0</td> <td>U</td> <td>5.0</td> <td>U</td> <td>5.0</td> <td>U</td> <td>5.0</td> <td>U</td>	1,1-Dichloroethane	5.0	U								
Bromochloromethane 5.0 U	cis-1,2-Dichloroethene	5.0	U								
Chloroform 5.0 U	2-Butanone	10	U								
1,1,1-Trichloroethane 5.0 U 5.0 U <t< td=""><td>Bromochloromethane</td><td>5.0</td><td>U</td><td>5.0</td><td>U</td><td>5.0</td><td>U</td><td>5.0</td><td>U</td><td>5.0</td><td>U</td></t<>	Bromochloromethane	5.0	U								
Cyclohexane 5.0 U	Chloroform	5.0	U								
Cyclohexane 5.0 U 5.0 U 5.0 U 5.0 U 5.0 U Carbon tetrachloride 5.0 U 5.0	1,1,1-Trichloroethane	5.0	U								
Benzene 5.0 U Methylcyclohexane 5.0 U 5.0 U 5.0 U 5.0 U 5.0 U	Cyclohexane	5.0	U								
1,2-Dichloroethane 5.0 U 5	Carbon tetrachloride	5.0	U								
1,4-Dioxane 100 R 100 R 100 R 100 R 100 R 100 R Trichloroethene 5.0 U 5.0 U 5.0 U 5.0 U 5.0 U 5.0 U Methylcyclohexane 5.0 U 5.0 U 5.0 U 5.0 U 5.0 U	Benzene	5.0	U								
1,4-Dioxane 100 R 100 R 100 R 100 R 100 R 100 R Trichloroethene 5.0 U 5.0 U 5.0 U 5.0 U 5.0 U 5.0 U Methylcyclohexane 5.0 U 5.0 U 5.0 U 5.0 U 5.0 U	1,2-Dichloroethane	5.0	U								
Trichloroethene 5.0 U		100	R								
Methylcyclohexane 5.0 U 5.0 U 5.0 U 5.0 U 5.0 U		5.0	U		U		U	5.0	U		U
											U
1,2-Dichloropropane 5.0 U 5.0 U 5.0 U 5.0 U 5.0 U	1,2-Dichloropropane		U	5.0	U	5.0	U	5.0	U	5.0	U
					U		U		U		U
	cis-1,3-Dichloropropene						U				U
			U				U		U		U
			U		U		U		U		U
			U				U				U

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Case #: 40646 SDG : E2RN9
Site : WEBB WELLFIELD

Lab.: SHEALY

Reviewer : Date :

Sample Number :	VBLKVF		VBLKVJ	VBLKVJ		VBLKVN		VBLKVX		
Sampling Location :										
Matrix:	Soil		Soil		Soil		Soil		Soil	
Units:	ug/Kg				ug/Kg		ug/Kg		ug/Kg	
Date Sampled :										
Time Sampled :										
%Moisture :	0		0		0		0		0	
pH:										
Dilution Factor :	1.0		1.0		1.0		1.0		1.0	
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
1,1,2-Trichloroethane	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Tetrachloroethene	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
2-Hexanone	10	U	10	U	10	U	10	U	10	U
Dibromochloromethane	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
1,2-Dibromoethane	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Chlorobenzene	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Ethylbenzene	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
o-Xylene	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
m,p-Xylene	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Styrene	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Bromoform	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Isopropylbenzene	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
1,1,2,2-Tetrachloroethane	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
1,3-Dichlorobenzene	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
1,4-Dichlorobenzene	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
1,2-Dichlorobenzene	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
1,2-Dibromo-3-chloropropar	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
1,2,4-Trichlorobenzene	5.0	U	5.0	UJ	5.0	U	5.0	U	5.0	U
1,2,3-Trichlorobenzene	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U

Analy	tical/	Results	(Qualified	Data)
Allal	uoai	INCOULLO	(Q uaiiii cu	Data

Page ____ of ____

Case #: 40646 SDG : E2RN9
Site : WEBB WELLFIELD

Lab.: SHEALY

Reviewer : Date :

Sample Number :	VHBLK01									
Sampling Location :										
Matrix:	Soil									
Units :	ug/Kg									
Date Sampled :	ug/itg									
Time Sampled :										
%Moisture :	0									
pH:	O									
Dilution Factor :	1.0									
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	5.0	U		Ü		Ü		J		J
Chloromethane	5.0	U								
Vinyl chloride	5.0	U								
Bromomethane	5.0	U								
Chloroethane	5.0	U								
Trichlorofluoromethane	5.0	U								
1,1-Dichloroethene	5.0	U								
1,1,2-Trichloro-1,2,2-trifluor		U								
Acetone	10	U								
Carbon Disulfide	5.0	U								
Methyl acetate	5.0	U								
Methylene chloride	5.0	U								
trans-1,2-Dichloroethene	5.0	U								
Methyl tert-butyl ether	5.0	U								
1,1-Dichloroethane	5.0	U								
cis-1,2-Dichloroethene	5.0	U								
2-Butanone	10	U								
Bromochloromethane	5.0	U								
Chloroform	5.0	U								
1,1,1-Trichloroethane	5.0	U								
Cyclohexane	5.0	U								
Carbon tetrachloride	5.0	U								
Benzene	5.0	U								
1,2-Dichloroethane	5.0	U								
1,4-Dioxane	100	R								
Trichloroethene	5.0									
Methylcyclohexane	5.0	U								
1,2-Dichloropropane	5.0	U								
Bromodichloromethane	5.0	U								
cis-1,3-Dichloropropene	5.0	U								
4-Methyl-2-pentanone	10	U								
Toluene	5.0	U								
trans-1,3-Dichloropropene	5.0	U								
	0.0									

DISCLAIMER: This package has been electronically assessed as an added service to our customer. It has not been either validated or approved by Region 5 and any subsequent use by the data user is strictly at the risk of the data user. Region 5 assumes no responsibility for use of unvalidated data.

Analy	tical/	Results	(Qualified	Data)
Allal	uoai	INCOULLO	(Q uaiiii cu	Data

Page ____ of ____ SDG: E2RN9

SHEALY Lab.:

WEBB WELLFIELD

Reviewer: Date:

Site:

Case #: 40646

Sample Number :	VHBLK01									
Sampling Location :										
Matrix :	Soil									
Units:	ug/Kg									
Date Sampled :										
Time Sampled :										
%Moisture :	0									
pH:										
Dilution Factor :	1.0									
Volatile Compound	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
1,1,2-Trichloroethane	5.0	U								
Tetrachloroethene	5.0	U								
2-Hexanone	10	U								
Dibromochloromethane	5.0	U								
1,2-Dibromoethane	5.0	U								
Chlorobenzene	5.0	U								
Ethylbenzene	5.0	U								
o-Xylene	5.0	U								
m,p-Xylene	5.0	U								
Styrene	5.0	U								
Bromoform	5.0	U								
Isopropylbenzene	5.0	U								
1,1,2,2-Tetrachloroethane	5.0	U								
1,3-Dichlorobenzene	5.0	U								
1,4-Dichlorobenzene	5.0	U								
1,2-Dichlorobenzene	5.0	U								
1,2-Dibromo-3-chloropropar	5.0	U								
1,2,4-Trichlorobenzene	5.0	U								
1,2,3-Trichlorobenzene	5.0	U								

16:47 Fri, Oct 29, 2010

SOW SOM01.2		N
DDTID 103527 SOW SOM01.2		Level=Low
Region 5	spun	Matrix=Soil
Contract EPW05031 R	Tentatively identified Compounds	Location=SB3
ase 40646 Contri	Tentatively	Sample=E2RP6
SDG E2RN9 Cas		VOA Low Med
Lab SHEALY (Shealy Environmental)		

CAS No. C	Compound Name	RT (mins)	Concentration		Lab Qualifier
	Unknown-01	7.89	19	ug/kg	J

	Nat	ional Functior	nal Guidelines Report #9	6#			16:47 Fri, Oct 29, 2010
Lab SHEALY (Shealy Environmental)	SDG E2RN9	Case 40646	Contract EPW05031	Region 5	DDTID 103527	DDTID 103527 SOW SOM01.2	
		Ter	entatively identified Compounds	spunoau			

Level=Low

Matrix=Soil

Location=SB4

Sample=E2RP7

VOA Low Med

CAS No. Con	Compound Name	RT (mins)	Concentration		Lab Qualifier
	Unknown-01	7.89 20	20	ug/kg	J

29, 2010	
16:47 Fri, Oct 29, 2010	

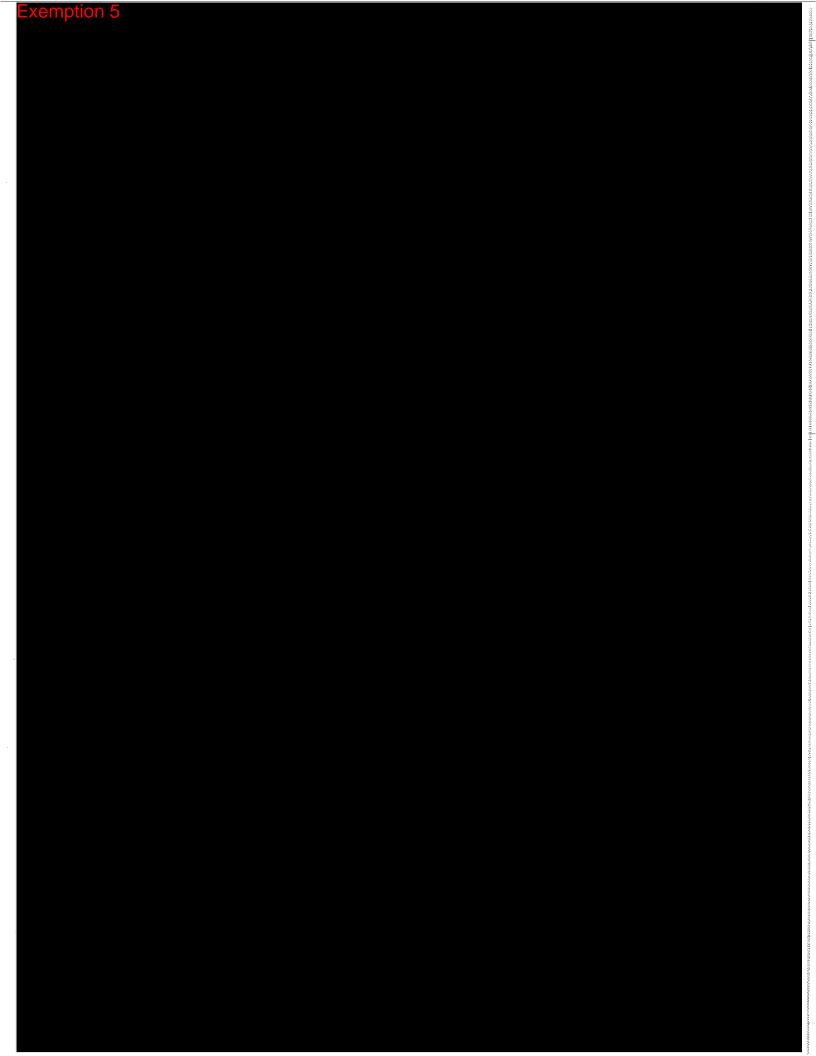
DDTID 103527 SOW SOM01.2		/M
DTID 103527		Wo l=leve1
Region 5 L	spun	Matrix=Soil
Contract EPW05031 F	Tentatively identified Compound	Location=SB5
 9	Tentatively	Sample=F2BO2
 Case 4064		Sam
SDG E2RN9		VOA Low Med
Lab SHEALY (Shealy Environmental)		

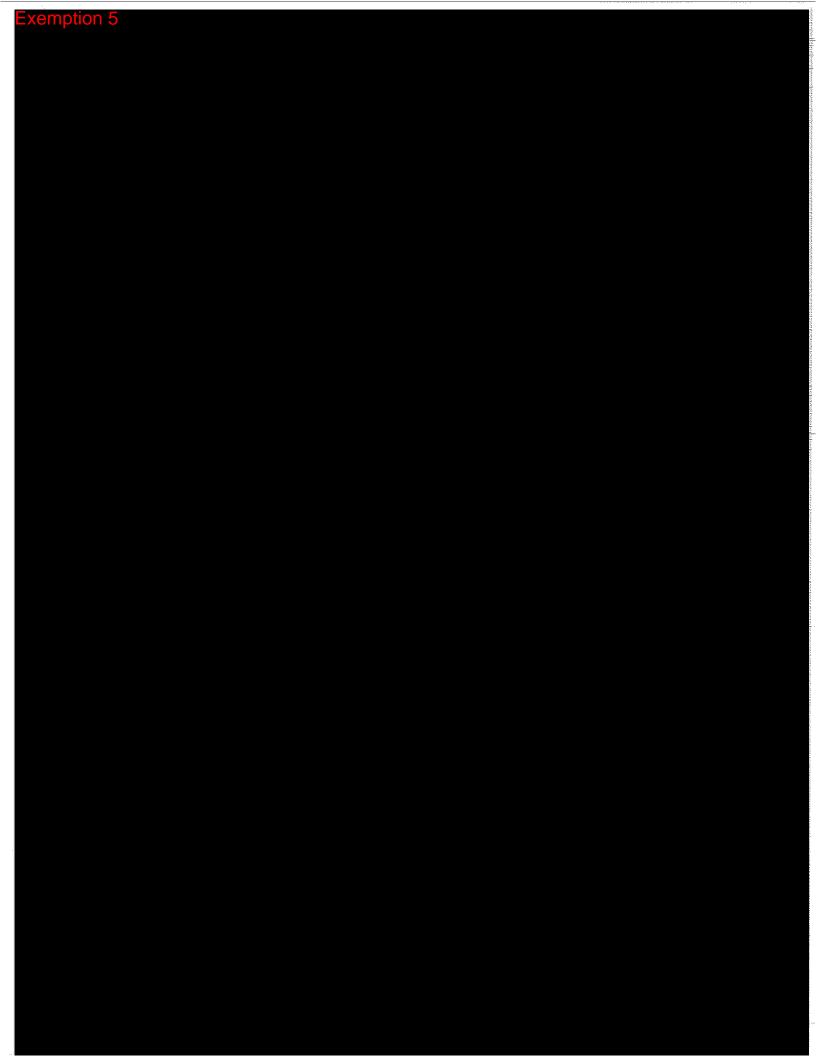
CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
	Unknown-01	7.89	16	ug/kg	J

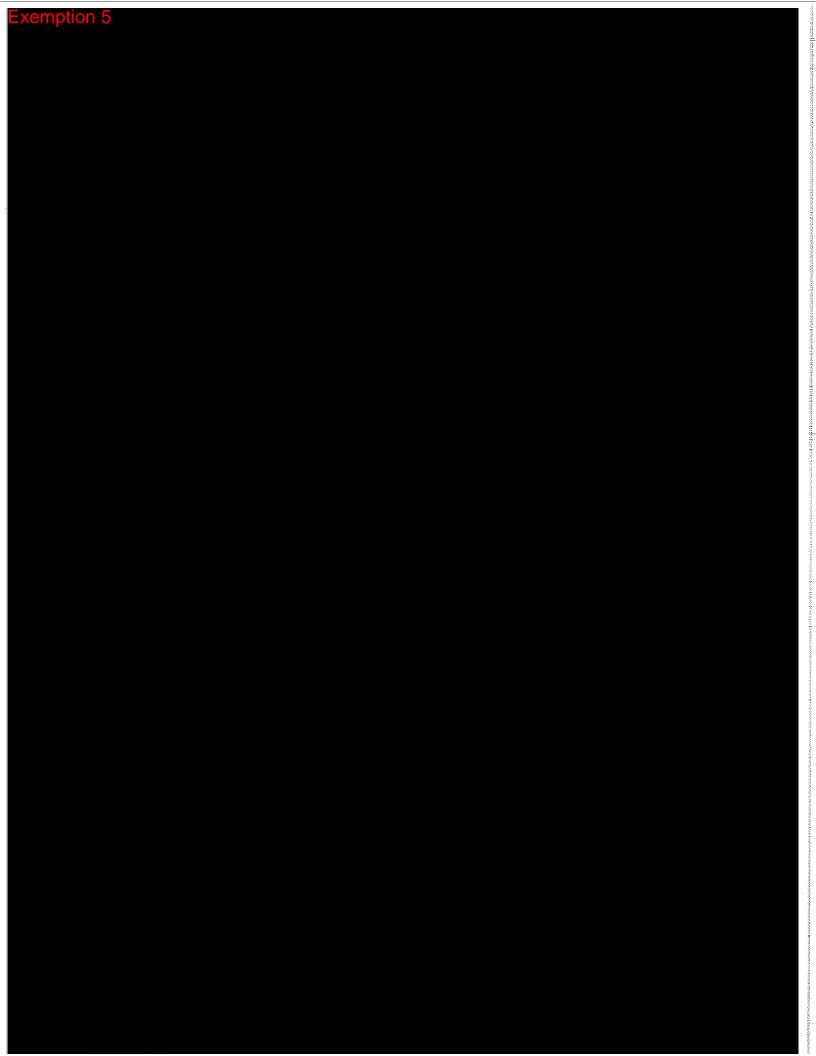
16:47 Fri, Oct 29, 2010

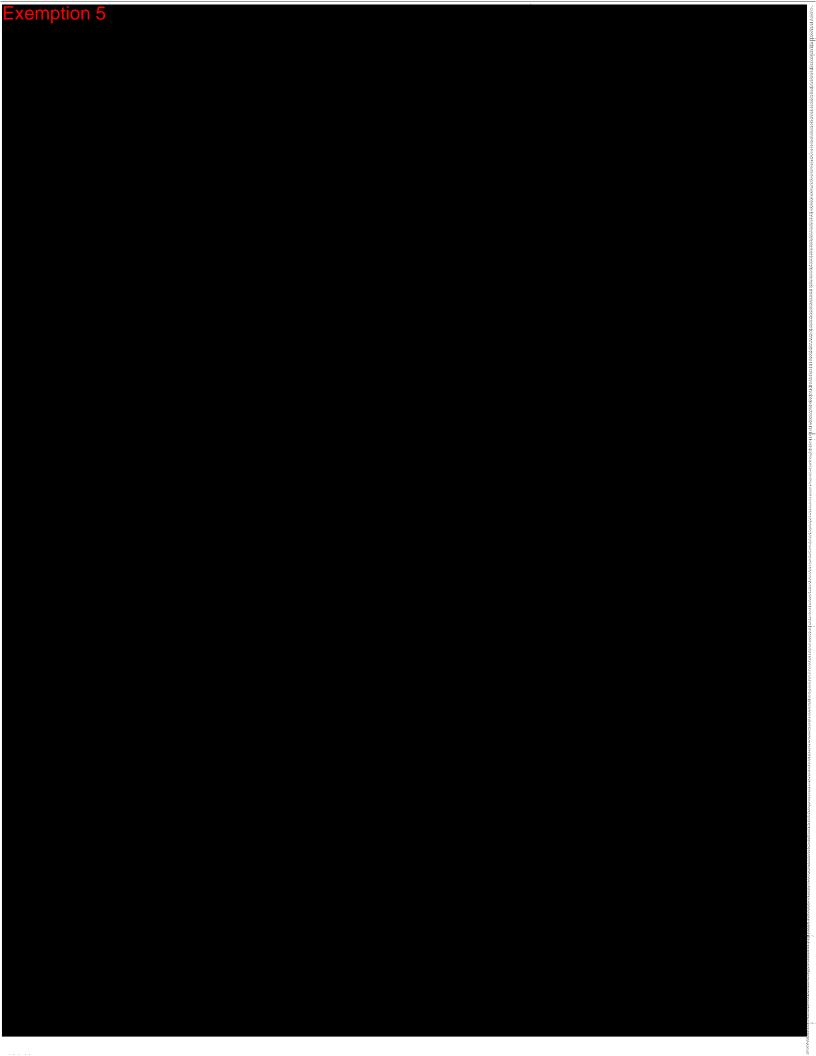
DDTID 103527 SOW SOM01.2		Level=Low
JTID 103527		
		Matrix=Soil
Region 5	npounds	R_data
 ontract EPW05031	ely identified Con	Location=No_TR_data
Case 40646 Co	Tentativ	Sample=E2RQ2RE
SDG E2RN9		VOA_Low_Med
Lab SHEALY (Shealy Environmental)		

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
	Unknown-01	7.88	12	ug/kg	J









Don't see your fish or site listed? Assume it is a Group 2 (general population: 1 meal/week; women/children: 1 meal/month).

Location	Species	Fish Size (inches)	Contaminant	Group
St. Joseph County (Lake Mi				
(downstream Petro Park to	Indiana State Line at S	St. Patrick's F	Park). Consumpt	tion of any
fish from this segment of the				
per month (Group 3) for the	general population ar	d NO CONS	UMPTION of an	v fish for the
sensitive population Exce				
	Bluegill	7+		4
	Common Carp	Follow stat	ewide advice	
	Channel Catfish	All		4
	Chinook Salmon	28+		4
	Carpsucker	Up to 19		4
	species	19+		5
	Rock Bass	Up to 7		2
	Smallmouth Bass	up to 16		2
	Steelhead	30+		4
	Yellow Bullhead	Up to 10		2
St. Mary's River		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Allen County	Black Redhorse	15+		3
	Carp	Up to 20		3
		20+		4
	Channel Catfish	13-15		3
		15+		4
	Largemouth Bass	Up to 15		3
		15+		4
	Silver Redhorse	17+		3
	White Sucker	11+		3
Sugar Creek (East Fork W	hite River Basin)			
Hancock/Johnson/Shelby	Bluegill	up to 6		1
Counties	Black Redhorse	up to 13		1
	Carp	ALL	0	2
	Longear Sunfish	Up to 5		1
	Northern Hogsucker	Up to 11		1
	Rock Bass	up to 6		1

General Population

○ = Mercury

□ = PCBs

Group 1 = Unlimited meals

Group 2 = 1 meal/week Group 3 = 1 meal/month

Group 4 = 1 meal/2 months Group 5 = DO NOT EAT

(For women and children, please refer to the Guidelines on Page 7.)



Historical Record Search Industrial Area Northeast of the Former Amphenol Facility Franklin, Indiana

IWM Consulting Group conducted an environmental historical study for an industrial area located northeast of the Former Amphenol Facility (Site) located in Franklin, Indiana. The objective of the study was to determine current and historical business usage of the industrial complex in order for a preliminary determination to be made regarding the possibility of operations having an adverse environmental affect on the nearby Indiana American Water Company Webb Well Field (Well Field).

IWM Consulting personnel reviewed readily available public files from the following locations:

- Johnson County Health Department (JCHD)
- Town of Franklin Public Library
- Johnson County, IN Museum of History
- The Indiana Department of Environmental Management
- Indiana State Archives
- Indiana Department of Transportation

The industrial area is currently occupied by numerous businesses offering varying commercial/industrial services and is located approximately 1,500 feet Northeast of the Site. The following sections summarize pertinent information discovered during the record search activities.

I. HISTORICAL AERIAL PHOTOGRAPHS

The following are descriptions of historical aerial photographs of the subject area, including the Site, the industrial area located Northeast of the Site, and the Well Field (located approximately 3,500 feet East/Northeast of the Site). Aerial photographs depicting the subject area were obtained from the Indiana State Archives (1936, 1941, 1956, 1962, and 1972), the Indiana Department of Transportation (1976, 1988, and 1998), and the Indiana Geological Survey web page (1998 and 2005).

1936 8-8-36 FO-8-95

The Site and the Well Field properties are vacant and appear to be utilized for agricultural purposes. A large industrial complex (exceeding approximately 100,000 square feet) is located Northeast of the Site, which consists of multiple industrial buildings. A railroad track is located along the north side of the industrial complex and is oriented in a southwest to northeast direction. Several smaller outbuildings appear to be present east and southeast of the larger industrial complex. A small "L" shaped building is present on

the north side of the railroad tracks and residential buildings appear to be present west/northwest of the "L" shaped building. Hurricane Road is present west of the site and appears to be the main access road to the industrial complex.

1941 9-11-41 FO-1B-146

The properties and structures appear largely unchanged from the 1936 Aerial Photograph with the exception of the following items:

- The existing industrial complex has been expanded to the east/northeast
- A small dirt access road leads northeast from the industrial complex and "dead ends" in an area that appears to be lacking vegetation. This area may have been utilized as a "dumping area", based on the lack of vegetation when compared to other areas of the industrial property
- Two man made ponds/lagoons are present east of industrial complex, along the east central portion of the industrial complex property

1956 6-5-56 FO-3R-180

The Site property remains vacant and appears to be used for agricultural purposes. An access road leading to a small building is now present on the Well Field property. A second building has been constructed east of the "L" shaped building located on the north side of the railroad tracks. The configuration of the main industrial complex building layout has changed slightly along the southern end through removal of one longer rectangular building and the addition of one smaller rectangular building. Additionally, a larger rectangular outbuilding has been constructed south of the larger industrial complex and the access road from Hurricane Road is more established. The man made ponds/lagoons are no longer present on the east central portion of the industrial complex property. Additionally, the access road leading northeast from the industrial complex to a possible "dumping area" is no longer present.

1962 9-18-62 FO-2CC-109

A facility has been constructed on the Site and the access road leading to a building on the Well Field property is still present and is more pronounced. The remaining properties from the 1956 description have not changed.

1972 9-20-72 A20 18081 172-255

A small commercial building (now Grimmer-Schmitt Compressors) has been constructed east/northeast of the Site, across Hurricane Road. The remaining properties from the 1962 description have not changed with the exception that it appears a new roof has been installed on about two-thirds of the main industrial complex buildings.



<u>1976 8-30-76</u> 41 6 94

The properties from the 1972 description have not changed with the exception that it appears additional portions of the roof have been replaced. Three above ground storage tanks (ASTs) appear to be present in the central portion of the property, along the south side of the main entrance and southwest of the southwestern outbuilding.

1988 9-27-88 41 No. 69

The commercial property (Grimmer-Schmitt Compressors) east of the Site, across Hurricane Road has expanded, and now consists of three buildings. The remaining surrounding properties from the 1976 description have not changed.

The main industrial complex shrinks in size due to the removal of several buildings along the eastern portion of the complex and the access roads on the property have been reconfigured. The area northeast of the industrial complex appears to be disturbed based on the apparent lack of vegetation now present in this area of the property. Eastview Drive has been constructed along the south side of the industrial complex.

1998 9-9-98

Eastview Drive is now present along the south side of the main industrial complex but the larger rectangular outbuilding south of the main industrial complex is located on the south side of Eastview Drive. One or two more commercial buildings have been constructed east of the large rectangular outbuilding, along the south side of Eastview Drive. A Golf Course is now present north of the railroad tracks and the industrial complex. Hundreds of vehicles are present on the east central portion of the main industrial complex property and this area of the property appears to be utilized as an automobile salvage yard. The remaining properties from the 1988 photograph have not changed.

2005

The automobiles are no longer present along the east central portion of the main industrial complex property. Two commercial buildings have been constructed in the southeast corner of the main industrial complex property, immediately south of the former automobile salvage yard. The buildings are located on the north side of Eastview Drive. All of the remaining properties from the 2005 photograph are similar to the 1998 photograph.

A copy of the 1936, 1941, 1956, 1962, 1972, 1998, and 2005 aerial photographs are included as Appendix A.



II. ENVIRONMENTAL & CITY DIRECTORY INFORMATION

The following information summarizes the addresses and current businesses located in the industrial complex located northeast of the Site.

Crossroads Recycling & Hurricane Road Industrial Development 100 Eastview Dr.

No IDEM files or JCHD files found.

<u>City Directory Information:</u> The site and address was not listed from 1935-1990. This address is identified as being occupied by the Franklin Auto & Salvage Yard in 1994, 1998, and 2000. Cross Roads Recycling is identified as being present at this address in 1996, 1998, 2000, 2001, and 2007. Franklin Machine Shop was also identified as being present at this address in 1996.

Vacant Property 200 Eastview Dr.

No IDEM files or JCHD files found.

<u>City Directory Information</u>: The site and address was not listed from 1935-1994. This address is identified as being occupied by J.E. Smith Trucking in 1996 and This and That Inside Flea Market in 2001. No listing was available for this address in 1998 and 2000 and the property is listed as being vacant in 2007.

Jesus Christ Latter Day Saints Church 201 Eastview Dr.

No IDEM files or JCHD files found.

<u>City Directory Information</u>: The site and address was not listed from 1935-1994. This address is identified as being occupied by Jesus Christ Latter Day Saints Church in 1996, 1998, 2000, 2001, and 2007.

Reed Manufacturing Services 1050 Eastview Dr.

No IDEM files or JCHD files found.

<u>City Directory Information:</u> The site was not listed from 1935-1998 and 2007. The site address is identified as Reed Manufacturing Service in 2000 and listed as RCO Reed Corporation (Screw Machine Products) in 2001. Although the site was not



listed in 2007, it should be noted that Reed Manufacturing Services still exists and is operational at the site in 2007.

Double S. Landscaping 1085 Eastview Dr.

No IDEM files or JCHD files found.

<u>City Directory Information:</u> The site was not listed from 1935-2000 and was listed as Franklin Machine (machine auto shop) in 2001. Double S. Landscaping is listed for the address in 2007.

Veneer Services 1130 Eastview Dr.

No IDEM files or JCHD files found.

<u>City Directory Information:</u> The site was not listed from 1935-2001 and was identified as Veneer Services in 2007.

All-Star Transmissions, Inc. 1134 Eastview Dr.

• No IDEM files or JCHD files found.

<u>City Directory Information:</u> The site was not listed from 1935-2001 and was identified as All-Stars Transmission Inc. in 2007.

Style Dance Academy 3585 Upper Shelbyville Rd.

• No IDEM files or JCHD files found

City Directory Information: The site was not listed from 1935-1998 and was identified as Four-K Equipment in 2000. The site is identified as Crescent Machinery Co. (heavy construction equipment rental) in 2001 and Style Dance Academy in 2007.

The City Directory information has been summarized in tabular format and is included as Appendix B.



III. HISTORICAL INFORMATION - INDUSTRIAL COMPLEX

A review of historical newspaper articles located in the Johnson County Historical Museum indicates that the industrial complex property was originally developed in 1893 as a canning factory. The business, named Franklin Canning Factory, canned peas, corn, and tomatoes. The operations and warehouse space was reportedly doubled in the early 1900's once the facility was acquired by a new owner. A fire occurred at the facility in approximately 1920. The facility was then acquired by the Hougland family in 1922 and was quickly repaired and the facility became fully operational. The facility was then called the Hougland Packing Company. The Hougland packing company employed 500 people to harvest and process approximately 1,400 acres of tomatoes and 3,000 acres of sweet corn, with smaller volumes of pumpkins. The Hougland Packing Co. thrived until 1953, when the business and facility was sold to Mr. Frank Cravens. It is reported that Mr. Cravens never processed any tomatoes.

IWM Consulting personnel reviewed readily available files pertaining to the industrial complex property and determined the multiple businesses identified in the City Directories prior to 1994 were listed with a general address of East Side – Hurricane Road. City Directory entries as far back as 1935 were located using this address identification. The City Directory review indicates that the property was occupied by Hougland Packing Company between 1935 and 1957. Various residences and industrial businesses (Johnson County Oil Co., Franklin Brokerage & Warehouse, Shell Oil Co, Cravens Truck Sales, Indiana Diecast Tool, Inc., and Johnson Crop Service) occupied the site for some length of time between 1957 and 1979. RCO Reed Corporation/RCO Reed Manufacturing Services is listed as occupying the site between 1980 and 1996. Franklin Transmission was also listed as occupying the site in 1981. No listings were available for this address description after 1996, which generally coincides with the City Directory listings for the current day addresses.

A Certified Sanborn® Map Report was obtained from Environmental Data Resources Inc. and provided seven (7) Sanborn Maps dated between 1886 and 1948. A review of the Sanborn Maps indicated the presence of the Franklin Canning Company in 1896, 1902, 1910, and 1916 and Hougland Packing Company in 1927 and 1948. The maps clearly identify the location of one (1) to three (3) onsite private groundwater wells used to supply water to the business. The maps in 1910 and 1916 indicate that Phoenix Chemicals are utilized onsite and display the location of several gasoline tanks and gasoline powered engines along the east side of the main building.

A copy of the pertinent articles obtained from the Johnson County, IN Museum of History is included in Appendix C and the Certified Sanborn® Map Report is included as Appendix D.



IV. CONCLUSION

Based on information discovered during the City Directory search, it appears that Mr. Cravens and his family operated several businesses out of this industrial complex, including the Johnson County Oil Co., Shell Oil Company (listed in 1959 and 1967), Franklin Brokerage & Warehouse Co., & Cravens Truck Sales (listed in 1959). Johnson Crop Service (listed in 1973-1978) and Indiana Diecast Tool, Inc. (listed in 1967) were also reportedly historically present at this property. In 1979, it appears that Mr. Cravens divested the property (or a portion thereof) as the property is consistently only occupied by RCO Reed Corporation/RCO Reed Manufacturing Service, which still operates at the property today.

In summary, the industrial complex located approximately 1,500 feet Northeast of the Site has been developed and used heavily by various types of industrial businesses since 1893. The industrial businesses were historically supplied with private water wells and septic fields for approximately 100 years and formerly utilized gasoline tanks and chemicals (per the reference to Phoenix Chemicals being onsite in the early 1910 and 1916). The 1941 Aerial Photograph clearly depicts two man made ponds/lagoons along the east central portion of the main industrial complex property and the ponds/lagoons are not present in subsequent aerial photographs starting in 1956 or the earlier photograph taken in 1936. The reason the man made ponds/lagoons were constructed and then subsequently filled in is unknown at this time. However, a possibility exists that the ponds/lagoons were once used as wastewater discharge points for the existing Hougland Packing Company. Additionally, it is likely that the former canning facility made and cleaned their own cans utilized during the canning operations.

If you have any questions regarding the information summarized within this Historical Record Search document, please do not hesitate to contact IWM Consulting at 317-347-1111.

Sincerely,

Bradley E. Gentry, LPG. Senior Project Manager



APPENDIX A HISTORICAL AERIAL PHOTOGRAPHS





Historical Record Search Industrial Area Northeast of the Former Amphenol Facility Franklin, Indiana

IWM Consulting Group conducted an environmental historical study for an industrial area located northeast of the Former Amphenol Facility (Site) located in Franklin, Indiana. The objective of the study was to determine current and historical business usage of the industrial complex in order for a preliminary determination to be made regarding the possibility of operations having an adverse environmental affect on the nearby Indiana American Water Company Webb Well Field (Well Field).

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The industrial area is currently occupied by numerous businesses offering varying commercial/industrial services and is located approximately 1,500 feet Northeast of the Site. The following sections summarize pertinent information discovered during the record search activities.

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the north side of the railroad tracks and residential buildings appear to be present west/northwest of the "L" shaped building. Hurricane Road is present west of the site and appears to be the main access road to the industrial complex.

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<u>1976 8-30-76 41 6 94</u>

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Crossroads Recycling & Hurricane Road Industrial Development 100 Eastview Dr.

No IDEM files or JCHD files found.

<u>City Directory Information:</u> The site and address was not listed from 1935-1990. This address is identified as being occupied by the Franklin Auto & Salvage Yard in 1994, 1998, and 2000. Cross Roads Recycling is identified as being present at this address in 1996, 1998, 2000, 2001, and 2007. Franklin Machine Shop was also identified as being present at this address in 1996.

Vacant Property 200 Eastview Dr.

No IDEM files or JCHD files found.

City Directory Information: The site and address was not listed from 1935-1994. This address is identified as being occupied by J.E. Smith Trucking in 1996 and This and That Inside Flea Market in 2001. No listing was available for this address in 1998 and 2000 and the property is listed as being vacant in 2007.

Jesus Christ Latter Day Saints Church 201 Eastview Dr.

No IDEM files or JCHD files found.

<u>City Directory Information:</u> The site and address was not listed from 1935-1994. This address is identified as being occupied by Jesus Christ Latter Day Saints Church in 1996, 1998, 2000, 2001, and 2007.

Reed Manufacturing Services 1050 Eastview Dr.

No IDEM files or JCHD files found.

<u>City Directory Information:</u> The site was not listed from 1935-1998 and 2007. The site address is identified as Reed Manufacturing Service in 2000 and listed as RCO Reed Corporation (Screw Machine Products) in 2001. Although the site was not



listed in 2007, it should be noted that Reed Manufacturing Services still exists and is operational at the site in 2007.

Double S. Landscaping 1085 Eastview Dr.

No IDEM files or JCHD files found.

<u>City Directory Information:</u> The site was not listed from 1935-2000 and was listed as Franklin Machine (machine auto shop) in 2001. Double S. Landscaping is listed for the address in 2007.

Veneer Services 1130 Eastview Dr.

No IDEM files or JCHD files found.

<u>City Directory Information:</u> The site was not listed from 1935-2001 and was identified as Veneer Services in 2007.

All-Star Transmissions, Inc. 1134 Eastview Dr.

No IDEM files or JCHD files found.

<u>City Directory Information:</u> The site was not listed from 1935-2001 and was identified as All-Stars Transmission Inc. in 2007.

Style Dance Academy 3585 Upper Shelbyville Rd.

No IDEM files or JCHD files found

<u>City Directory Information:</u> The site was not listed from 1935-1998 and was identified as Four-K Equipment in 2000. The site is identified as Crescent Machinery Co. (heavy construction equipment rental) in 2001 and Style Dance Academy in 2007.

The City Directory information has been summarized in tabular format and is included as Appendix B.



III. HISTORICAL INFORMATION - INDUSTRIAL COMPLEX

A review of historical newspaper articles located in the Johnson County Historical Museum indicates that the industrial complex property was originally developed in 1893 as a canning factory. The business, named Franklin Canning Factory, canned peas, corn, and tomatoes. The operations and warehouse space was reportedly doubled in the early 1900's once the facility was acquired by a new owner. A fire occurred at the facility in approximately 1920. The facility was then acquired by the Hougland family in 1922 and was quickly repaired and the facility became fully operational. The facility was then called the Hougland Packing Company. The Hougland packing company employed 500 people to harvest and process approximately 1,400 acres of tomatoes and 3,000 acres of sweet corn, with smaller volumes of pumpkins. The Hougland Packing Co. thrived until 1953, when the business and facility was sold to Mr. Frank Cravens. It is reported that Mr. Cravens never processed any tomatoes.

IWM Consulting personnel reviewed readily available files pertaining to the industrial complex property and determined the multiple businesses identified in the City Directories prior to 1994 were listed with a general address of East Side – Hurricane Road. City Directory entries as far back as 1935 were located using this address identification. The City Directory review indicates that the property was occupied by Hougland Packing Company between 1935 and 1957. Various residences and industrial businesses (Johnson County Oil Co., Franklin Brokerage & Warehouse, Shell Oil Co, Cravens Truck Sales, Indiana Diecast Tool, Inc., and Johnson Crop Service) occupied the site for some length of time between 1957 and 1979. RCO Reed Corporation/RCO Reed Manufacturing Services is listed as occupying the site between 1980 and 1996. Franklin Transmission was also listed as occupying the site in 1981. No listings were available for this address description after 1996, which generally coincides with the City Directory listings for the current day addresses.

A Certified Sanborn® Map Report was obtained from Environmental Data Resources Inc. and provided seven (7) Sanborn Maps dated between 1886 and 1948. A review of the Sanborn Maps indicated the presence of the Franklin Canning Company in 1896, 1902, 1910, and 1916 and Hougland Packing Company in 1927 and 1948. The maps clearly identify the location of one (1) to three (3) onsite private groundwater wells used to supply water to the business. The maps in 1910 and 1916 indicate that Phoenix Chemicals are utilized onsite and display the location of several gasoline tanks and gasoline powered engines along the east side of the main building.

A copy of the pertinent articles obtained from the Johnson County, IN Museum of History is included in Appendix C and the Certified Sanborn® Map Report is included as Appendix D.



IV. CONCLUSION

Based on information discovered during the City Directory search, it appears that Mr. Cravens and his family operated several businesses out of this industrial complex, including the Johnson County Oil Co., Shell Oil Company (listed in 1959 and 1967), Franklin Brokerage & Warehouse Co., & Cravens Truck Sales (listed in 1959). Johnson Crop Service (listed in 1973-1978) and Indiana Diecast Tool, Inc. (listed in 1967) were also reportedly historically present at this property. In 1979, it appears that Mr. Cravens divested the property (or a portion thereof) as the property is consistently only occupied by RCO Reed Corporation/RCO Reed Manufacturing Service, which still operates at the property today.

In summary, the industrial complex located approximately 1,500 feet Northeast of the Site has been developed and used heavily by various types of industrial businesses since 1893. The industrial businesses were historically supplied with private water wells and septic fields for approximately 100 years and formerly utilized gasoline tanks and chemicals (per the reference to Phoenix Chemicals being onsite in the early 1910 and 1916). The 1941 Aerial Photograph clearly depicts two man made ponds/lagoons along the east central portion of the main industrial complex property and the ponds/lagoons are not present in subsequent aerial photographs starting in 1956 or the earlier photograph taken in 1936. The reason the man made ponds/lagoons were constructed and then subsequently filled in is unknown at this time. However, a possibility exists that the ponds/lagoons were once used as wastewater discharge points for the existing Hougland Packing Company. Additionally, it is likely that the former canning facility made and cleaned their own cans utilized during the canning operations.

If you have any questions regarding the information summarized within this Historical Record Search document, please do not hesitate to contact IWM Consulting at 317-347-1111.

Sincerely,

Bradley E. Gentry, LPG. Senior Project Manager



APPENDIX A HISTORICAL AERIAL PHOTOGRAPHS



SI Deliverables Still Outstanding

(Comments)

PreCERCLIS Screenings

- may be after Jan. 31 1. Nu Process Cleaners (report needed)
- 2. National Standard (2010-2011 commitment)
- 3. Armstrong Neighborhood Groundwater Contamination (2010-2011 Commitment)

Preliminary Assessments

- 1. Jasper Wood Products (2010-2011 Commitment)
- 2. Metals Refining (revisions needed)

Site Inspections

- 1. Keystone Corridor (Revisions needed)
- ⁴ 2. Hurwich Metals (2010-2011 Commitment)
 - 3. Holly Drive Site (2010-2011 Commitment)
 - 4. Webb Well Field (2010-2011 Commitment)

Reassessments

- 1. Masterwear (2010-2011 Commitment)
- 2. Avanti Indianapolis (2010-2011 Commitment)

HRS Documentation Records

1. Gary Development (Revisions Ongoing)

MGPS
BECKS LAKE NEEDS MOD MEMO SEE PORTAL
SUGAR CREEK-NEEDS REASSESSMENT

State Form 4336

#100110907 DEPARTMENT OF ENVIRONMENTAL MANAGEME **INDIANAPOLIS**

OFFICE MEMORANDUM

*Not for Public Release

Date:

January 3, 2011

To:

Tim Johnson

Site Investigation Section

Thru: Larry Studebaker, The

Geological Services

From:

Bob Martin *RM* 1-3-11

Geologist (LPG# 1422)

Geology Section for Geological Services

Subject:

Webb Wellfield

Franklin, Johnson County Site #7300089 (GZ02H)

Geology Section staff has evaluated soil descriptions and static ground water elevations obtained during the Indiana - American Water Company, Webb Wellfield site investigation performed on October 5, thru October 13, 2010. The purpose of the investigation is to identify the presence of soil and ground water contamination near the area of the Webb Wellfield, and possible receptors. This memo documents Geology staff's findings and interpretations of the field information for characterizing hydrogeologic conditions in the area of the investigation.

SITE REVIEW

According to the Pre-CERCLIS Screening Report for the Webb Wellfield Franklin, Indiana, dated December 15, 2009, drinking water samples collected from the Webb Wellfield by the Indiana-American Water Company (IAWC) and submitted to the IDEM OWQ Drinking Water Branch, contain cis-1,2dichloroethylene (cis-1,2-DCE), and trans-dichloroethylene (trans-1,2-DCE). Cis-1,2-DCE has been detected at levels exceeding the MCL (70ppb). Trans-1,2-DCE has not been detected at concentrations above the MCL (100 ppb). The Webb Wellfield is comprised of three production wells (Wells 2, 3 and 5) located near the intersection of Johnson County Roads 440E and 100N. A brief description of the geology and hydrogeology of the area surrounding the Webb Wellfield based on published literature is summarized in the January 28, 2010, Geology Section Office Memorandum.

COMMENTS

Four soil borings and three monitoring wells were installed for the Indiana - American Water Company, Webb Wellfield site investigation. Soil borings are identified as S1, S2, S3 and S4. Boring logs are included as Figures 1 thru 4 and boring locations are illustrated on Figure 5. Soil borings were installed using a GeoProbe 6620DT push-probe tracked vehicle. Soil cores were collected in clear, 2 inch diameter Macro-Core PVC liners, using a 2.25 inch diameter MC5 sampler. Cores were collected and continuously described from the ground surface to a depth of 15 feet in borings S1, S2 and S4, and 20 feet in boring S3.

Immediately following the retrieval of the deepest Macro-Core liner from each boring, sample liners were split, opened, and scanned for volatile organic compounds (VOCs) using a Multi REA gas detector, model PGM50-5P. Given the absence of detectable soil vapors or visual clues, soil samples were collected for laboratory VOC analyses from each boring at the base of the material displaying the highest porosity using Webb Wellfield Site #7300089 (GZ02H) January 3, 2011 Page 3 of 3

four wells were subsequently surveyed to mean sea level. However, since monitoring wells were completed to depth without collecting soil samples for description, the physical characteristics and extent of the saturated units or aquifers which they penetrate are not known.

Based on ground water depths determined from the four wells on October 13, 2010; ground water elevations were calculated and a ground water flow map prepared. Ground water flow for this date is interpreted to be south-southeasterly or approximately in the direction of Hurricane Creek (Figure 6). The gradient of the potentiometric surface between S1 and S4 is calculated to be 0.0044. Based on flow direction and the relatively steep gradient between measuring points located on the same side of the creek, it appears that withdrawal from the Webb Wellfield is influencing shallow ground water flow. However, since it is not known whether the well field was active on this date, or whether the wells installed for this study are screened within the same or different hydrologic units, the interpretation of ground water as illustrated in Figure 6 may not be truly reflective of typical flow conditions. Further, it is probable that ground water flow directions have varied during the past.

CONCLUSION

Geology Section staff reviewed soil boring descriptions and water level measurements collected during the field investigation of the Indiana - American Water Company, Webb Wellfield. Interpretation of the findings suggests the upper 15 to 20 feet of unconsolidated materials are glacial tills of the Wisconsinan Stage. An older pre-Wisconsinan glacial till may be present near the bottom of soil boring S1. At each soil boring location, the texture of glacial till was determined to be silt loam with alternating horizons of silt loam, sandy loam and loamy sand. Saturated materials were encountered near the bottoms of soil borings S1, S2 and S4, but their horizontal and vertical extents are unknown.

Based on static water elevations obtained from monitoring wells and the residential well located at soil boring S3, ground water flow in the area of the Webb Wellfield is interpreted to be south-southeasterly. However, because it is not known whether the wells are located within the same saturated unit, nor whether static water level measurements are representative of natural conditions, the interpretation of ground water flow in the uppermost saturated zone may not be accurate and has likely changed during the past.

REFERENCES

Indiana Department of Environmental Management, Office of Land Quality, Site Investigation Section; December 15, 2009, *Pre-CERCLIS Screening Report for the Webb Wellfield Franklin, Indiana*.

Indiana Department of Environmental Management, Office of Land Quality, Geology Section; January 28, 2010, Office Memorandum

Shaver, R. H.; Burger, Ann M.; and others, 1970, Compendium of Rock-Unit Stratigraphy in Indiana – Bulletin 43, Indiana Department of Natural Resources, Geological Survey.

